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RS 221130

USAFETAC/DS-88/026

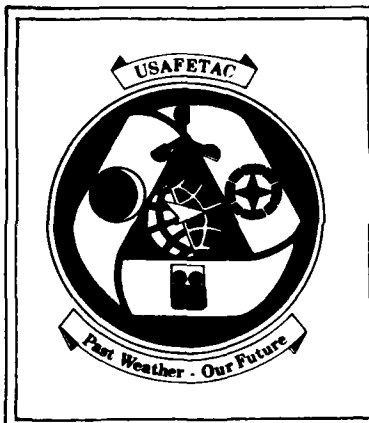
27 JUN 1986

DTIC FILE 001

OPERATING LOCATION - A

USAFETAC

Air Weather Service (MAC)



"LIMITED SURFACE OBSERVATIONS" CLIMATIC SUMMARY "LISOCs"

MURMANSK USSR
N 68 58

E 033 03 ELEV 151 FT

MSC #221130

PARTS A - F HOURS SUMMARIZED: 0000 - 2300

PERIOD OF RECORD:

HOURLY OBSERVATIONS: SEP 77 - AUG 87

SUMMARY OF DAY DATA: NONE

JUN 22 1988

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19. Abstract: A statistical data summary of surface weather observation climatology: Murmansk USSR. This summary is similar to the Revised Uniform Summary of Surface Weather Observations (RUSSWO), but is based on data collected from limited-duty weather observing stations; i.e., those that take weather observations less than 24 hours a day, 7 days a week. The summary is in five parts: PART 1, Weather Conditions and Atmospheric Phenomena; PART 2, Surface Winds; PART 3, Ceiling and Visibility; PART 4, Psychrometric Summaries; and PART 5, Pressure Summaries. Note that PART 2, Precipitation, is omitted. See USAFETAC/TN-83-001 (AD132186), An Aid For Using The Revised Uniform Summary of Surface Weather Observations (RUSSWO), for complete descriptions of contents and instructions for use.

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REVIEW AND APPROVAL STATEMENT

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This document has been reviewed and is approved for publication.

FOR THE COMMANDER

A handwritten signature in dark ink, appearing to read 'Walter S. Burghmann', with a long horizontal flourish extending to the right.

WALTER S. BURGMANN
Scientific and Technical Information Program Manager

LIMITED SURFACE OBSERVATIONS CLIMATIC SUMMARY

STATION NAME: MURMANSK USSR

STATION NUMBER: 201130

SUMMARIZED HOURS: SYNOPSIS 6-HOURLY

PERIOD OF RECORD

HOURLY OBSERVATIONS: SEP 77 - AUG 87

SUMMARY OF DAY DATA (TEMPERATURES ONLY): DEC 56 - AUG 87 DATA NOT AVAILABLE
SUMMARY OF DAY DATA (PART TIME): NONE

TIME CONVERSION LST TO GMT: -3

DATE PRODUCED: 30 DEC 87

ALL USERS OF THIS LISOLS MUST FAMILIARIZE THEMSELVES WITH THE SITE'S DATA LIMITATIONS PRIOR TO USING OR DISTRIBUTING THESE SUMMARIES. A SPECIAL CAVEAT PAGE PROVIDES IMPORTANT INFORMATION FOR ALL USERS. THIS CAVEAT PAGE IS LOCATED IN FRONT OF THE SUPPLEMENTAL SECTION.

OL-7/USAFETAC/MAC/AWS
ASHEVILLE NC 28801

LIMITED SURFACE OBSERVATIONS CLIMATIC SUMMARIES--LIS00S

HOURLY OBSERVATIONS: ALL RECORD OR RECORD SPECIAL OBSERVATIONS RECORDED ON THE AWS FORMS 10/10A AT SCHEDULED HOURLY INTERVALS.

SUPPLEMENTAL DATA: DATA DERIVED FROM EARLIER PERIODS IF AVAILABLE, AND/OR FROM ONE OR MORE REPRESENTATIVE SITES AND COMBINED BY A METEOROLOGIST.

DESCRIPTION OF SUMMARIES: PRECEDING EACH PART OF THE RUSSWD IS A BRIEF DISCUSSION OF THE SUMMARY INCLUDING THE MANNER OF PRESENTATION.

HOURLY SUMMARIES CONTAINING "TOTALS" AND "ALL HOURS" ARE ONLY FOR THOSE HOURS SUMMARIZED. IN COMPUTING THESE VALUES THE VALUES IN THE 3-HOUR TIME GROUPS WERE ADDED AND DIVIDED BY THE NUMBER OF GROUPS.

STANDARD 3-HOUR TIME GROUPS: IN ALL SUMMARIES SHOWING DIURNAL VARIATIONS, WE SUMMARIZE DATA USING THE FOLLOWING EIGHT 3-HOUR TIME PERIODS IN LOCAL STANDARD TIME: 0000-0200, 0300-0500, 0600-0800, 0900-1100, 1200-1400, 1500-1700, 1800-2000, 2100-2300 LST.

FOR A DETAILED DESCRIPTION OF EACH SUMMARY WITH EXAMPLES AND EXERCISES ON ITS USAGE, SEE USAFETAC/TN-83-001, "AN AID FOR USING THE REVISED UNIFORM SUMMARY OF SURFACE WEATHER OBSERVATIONS" (RUSSWD).

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PART E: TEMPERATURE AND RELATIVE HUMIDITY SUMMARIES

PART F: PRESSURE SUMMARIES

SUPPLEMENTAL DATA SECTION--SUMMARY OF DAY DATA

ANSMC NUMBER: THIS NUMBER IS THE AIR WEATHER SERVICE MASTER STATION CATALOG NUMBER. THIS NUMBER IS COMPRISED OF THE WMO NUMBER WITH THE ADDITION OF A SUFFIX (0 THROUGH 9). IN CASES WHERE THERE IS NO DESIGNATED WMO NUMBER, A 6-DIGIT NUMBER IS CREATED IN AGREEMENT WITH WMO RULES PLUS A SIXTH DIGIT. THESE NUMBERS ARE ALSO REFERRED TO AS DATSAV OR USAFETAC NUMBERS WHICH UNIQUELY IDENTIFY MORE THAN 15,000 REPORTING STATIONS WORLD WIDE.

NOTE: THE FIRST AND LAST FOUR GROUPS MAY OR MAY NOT CONTAIN ALL THREE HOURS. SEE HOURS SUMMARIZED ON COVER OR STATION HISTORY SHEET TO DETERMINE WHICH HOURS ARE INCLUDED IN THESE TWO HOUR GROUPS.



Dist	ASST. DIR./OF
A-1	Special

STATION NO ON SUMMARY	STATION NAME	LATITUDE	LONGITUDE	FIELD ELEV (FT)	CALL SIGN	WMO NUMBER
221130	MURMANSK USSR	N 68 58	E 033 03	151 FT	N/A	

STATION LOCATION AND INSTRUMENTATION HISTORY

NUMBER OF LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY
			FROM	TO			FIELD (FT)	HT. BARO.	
1.	MURMANSK USSR	FGN	SEP 77	AUG 87	N 68 58	E 033 03	151 FT	N/A	8

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
		N/A	N/A	N/A	N/A	

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WEATHER CONDITIONS AND ATMOSPHERIC PHENOMENA SUMMARIES

WEATHER CONDITIONS SUMMARY

1. A PERCENTAGE FREQUENCY OCCURRENCE SUMMARY OF VARIOUS ATMOSPHERIC PHENOMENA AND OBSTRUCTIONS TO VISION.
2. DATA BASED ON HOURLY OBSERVATIONS.
3. SUMMARIZED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

DEFINITIONS:

THUNDERSTORMS: ALL REPORTED THUNDERSTORMS, TORNADOES AND WATERSPOUTS.

RAIN AND/OR DRIZZLE: ALL REPORTED RAIN AND OR DRIZZLE FALLING TO THE GROUND BUT NOT FREEZING.

FREEZING RAIN AND/OR FREEZING DRIZZLE (GLAZE): ALL REPORTED FREEZING RAIN OR FREEZING DRIZZLE.

SNOW AND/OR SLEET. SNOW INCLUDING SNOW PELLETS AND GRAINS, ICE CRYSTALS AND PELLETS, AND/OR SLEET (ICE PELLETS).

HALE: ALL REPORTED HAIL.

ALL PRECIPITATION: THIS CATEGORY INCLUDES ALL OBSERVATIONS REPORTING PRECIPITATION. BECAUSE MORE THAN ONE TYPE OF PRECIPITATION MAY APPEAR IN A SINGLE OBSERVATION, THE SUM OF THE PERCENTAGES IN THE INDIVIDUAL COLUMNS MAY EXCEED THE PERCENTAGES IN THIS COLUMN.

FUG: ALL REPORTED FOG, ICE FOG AND (GROUND FOG.

SMOKE AND/OR HAZE: ALL REPORTED SMOKE, HAZE AND ANY COMBINATION THEREOF.

BLOWING SNOW: ALL REPORTED BLOWING SNOWS INCLUDING DRIFTING WHEN REPORTED.

DUST AND/OR SAND: ALL REPORTED DUST, SAND, BLOWING DUST, BLOWING SAND AND ANY COMBINATION THEREOF. THE ATMOSPHERIC PHENOMENA SUMMARY (DAYS WITH) INCLUDES ONLY THOSE REPORTS WHEN THE PHENOMENA VISIBILITY LESS THAN 5/8 MILES (1000 METERS).

ALL OBSTRUCTIONS TO VISION: INCLUDES ALL REPORTS OF OBSTRUCTIONS TO VISION (FOG THRU DUST/SAND) AND BLOWING SPRAY. BECAUSE MORE THAN ONE PHENOMENA PER OBSERVATION MAY OCCUR, THE SUM OF THE INDIVIDUAL COLUMNS MAY EXCEED THIS COLUMN.

NOTES:

1. A VALUE IN THE TABLES OF ".00" INDICATES LESS THAN .05% OCCURRENCE WHICH IS USUALLY ONLY ONE OCCURRENCE

2. METAR STATIONS (BEGINNING IN JAN 1969) AND SYNOPTIC REPORTING STATIONS RECORDED ON THE AWS FORMS 10/10A AND TRANSMITTED LONGLINE ONLY THE HIGHEST ORDER OF ATMOSPHERIC PHENOMENA OBSERVED. BEGINNING IN JAN 1970, METAR STATIONS RECORDED ALL OBSERVED PHENOMENA BUT CONTINUED TO TRANSMIT ONLY THE HIGHEST ORDER. FOR EXAMPLE, IF THE OBSERVATION CONTAINED RAIN, FOG AND SMOKE, ALL THREE WILL APPEAR ON THE AWS FORMS 10/10A, BUT ONLY THE RAIN WAS TRANSMITTED LONGLINE. THEREFORE ONLY THE RAIN APPEARS IN OUR DATA BASE FOR HOURLY SUMMARIZATION. THIS PRACTICE EFFECTS THE PERCENTAGES IN THE TABLES.

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS
FROM FOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN

HOURS (LST)	TSMS	RAIN E/OF DRIZZLE	FRZING RAIN E/OF DRIZZLE	SNOW E/OF SLEET	HAIL	% OBS WITH PRECIP	FOG	SMOKE E/OF HAZE	BLOWING SNOW	DUST E/OF SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02		.7	.3	32.3	.3	33.3	18.0		2.0		20.1	294
03-05				34.2		34.2	16.6		2.3	.3	19.3	301
06-08				38.4		38.4	15.1	.3	.7		16.1	292
09-11			.3	37.7		38.0	15.7	.7	.3		16.7	300
12-14				32.8		32.8	21.7	1.4	.3		23.4	290
15-17				32.4		32.4	23.9	1.6	.6		26.7	309
18-20				30.4	.3	30.7	20.3	.3	.3		20.9	296
21-23		.3		37.7		37.7	18.2	.6	1.6	.3	20.8	308
TOTALS		.4	.1	34.5	.1	34.7	18.7	.6	1.0	.1	20.4	2390

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB

HOURS (LST)	TSMS	RAIN E/OF DRIZZLE	FRZING RAIN E/OF DRIZZLE	SNOW E/OF SLEET	HAIL	% OBS WITH PRECIP	FOG	SMOKE E/OF HAZE	BLOWING SNOW	DUST E/OF SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02				31.1	.4	31.5	9.6	1.1	.4		11.1	270
03-05		.4		31.5		31.9	12.2	.4	1.3		14.3	279
06-08		.4		32.5		32.5	9.9	.4	1.1		11.3	274
09-11		.7		31.0		31.4	13.1	.7	.7	.4	15.0	274
12-14		.4		27.4		27.4	15.3	.4	.7		16.4	281
15-17		1.1		24.8		25.9	10.4	.7	.7		11.9	278
18-20		1.6		27.4		26.4	10.6	.7	1.1		12.4	274
21-23		.4	.7	27.4		29.2	10.5	.7	.7		11.9	277
TOTALS		.7	.1	29.1	.1	29.8	11.5	.6	.9	.1	13.0	2207

GLOBAL CLIMATOLOGY BRANCH
USAF/CLTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR

HOURS (LST)	TESTS	RAIN E/OF DRIZZLE	FRZING RAIN E/OF DRIZZLE	SNOW E/OF SLEET	HALE	% OBS WITH PRECIP	FOG	SMOKE E/OF HALE	BLOWING SNOW	DUST E/OF SAND	% OBS W/CBST TO VISION	TOTAL OBS
00-02		.3		25.0		25.3	11.6	1.6	.3		13.8	304
03-05		.7	.7	30.9		32.2	13.0		1.2		14.3	307
06-08		.3		33.4		33.4	17.0	.3	.3		17.7	305
09-11			.3	32.4		32.7	21.4	1.0	.3		22.7	309
12-14		.3		26.7		26.7	17.3	.7	.7		18.7	300
15-17		.3		22.5		22.9	7.6	3.3	.7		11.8	306
18-20		2.0		20.8		22.5	4.6	1.3	.3		6.2	307
21-23		.3		26.9		27.2	6.5	2.6	.3		9.4	309
TOTALS		.5	.1	27.3		27.9	12.4	1.4	.5		14.3	2447

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR

HOURS (LST)	TESTS	RAIN E/OF DRIZZLE	FRZING RAIN E/OF DRIZZLE	SNOW E/OF SLEET	HALE	% OBS WITH PRECIP	FOG	SMOKE E/OF HALE	BLOWING SNOW	DUST E/OF SAND	% OBS W/CBST TO VISION	TOTAL OBS
00-02		3.1	.3	26.0		29.1	2.4	2.8		.3	5.5	289
03-05		3.0		30.5		32.6	6.7	1.3			8.1	298
06-08		3.1		29.4		31.7	13.0	2.0			15.0	293
09-11		3.4		30.2		33.2	10.5	1.4			11.9	295
12-14		2.7	.3	26.5		29.2	3.8	1.7			5.5	291
15-17		3.4		18.5		21.5	.3	.7			1.0	297
18-20		2.6		23.8		26.2	.3	.7			1.0	290
21-23		4.4		24.2		29.5	.7	1.3			2.0	298
TOTALS		3.2	.1	26.1		29.0	4.7	1.5		.0	6.3	2351

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS
FROM HOURLY OBSERVATIONS

STATION NUMBER: 20113 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAY

HOURS (LST)	TIME	RAIN L/DR DRIZZLE	FREEZING RAIN L/DR DRIZZLE	SNOW L/DR SLEET	HAIL	% OBS WITH PRECIP	FOG	SMOKE L/DR HAZE	BLOWING SNOW	DUST L/DR SAND	% OBS W/CUST TO VISION	TOTAL OBS
00-02		10.5		8.6		18.8	2.6	6.9			9.5	304
03-05		9.0		14.3		23.5	8.5	3.9			12.4	307
06-08		9.2		18.0		26.5	8.5	2.0			10.5	306
09-11		10.2		16.7		26.6	5.6	1.6			7.2	305
12-14		11.0		14.4	.3	26.1	3.9	.7			4.6	306
15-17		9.9		11.9		20.6	.7	.7			1.3	303
18-20		9.6		11.3		19.6	.7				.7	301
21-23		11.4		11.4		22.5		1.0			1.0	306
TOTALS		10.1		13.3	.0	23.1	3.8	2.1			5.9	2438

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUN

HOURS (LST)	TIME	RAIN L/DR DRIZZLE	FREEZING RAIN L/DR DRIZZLE	SNOW L/DR SLEET	HAIL	% OBS WITH PRECIP	FOG	SMOKE L/DR HAZE	BLOWING SNOW	DUST L/DR SAND	% OBS W/CUST TO VISION	TOTAL OBS
00-02		15.2		6.1		20.9	2.7	1.0			3.7	296
03-05		12.9		7.8	.3	20.7	6.5	3.1			9.5	294
06-08		16.9		7.1	1.0	24.7	7.6	3.4			11.2	295
09-11		20.1		8.8		27.9	2.4	1.7			4.1	294
12-14		16.7		7.1		23.1	2.7			.3	3.1	294
15-17	1.0	17.7		6.1		23.8	1.0				1.0	294
18-20	.3	15.1		6.4		21.1	.3				.3	298
21-23	.7	16.6		5.4		21.5	.3	1.0			1.3	297
TOTALS		16.4		6.9	.2	23.0	3.0	1.3		.0	4.3	2362

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL

HOURS (LST)	TSMS	RAIN E/OF DRIZZLE	FRZING RAIN E/OF DRIZZLE	SNOW E/OF SLEET	HALE	% OBS WITH PRECIP	FOG	SMOKE E/OF HAZE	BLOWING SNOW	DUST E/OF SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02	.7	18.6				18.6	2.9	2.6			5.5	307
03-05		17.2				17.2	6.5	5.2			11.7	309
06-08		17.9				17.9	8.8	2.9			11.7	307
09-11		21.4				21.4	6.8	2.6		.3	9.7	308
12-14	.3	15.7			.3	16.0	1.3	.7			2.0	306
15-17	.3	16.3				16.3	.3				.3	306
18-20	.3	14.4				14.4	.7				.7	305
21-23	.3	16.7				16.7	2.0				2.0	305
TOTALS	.6	17.8			.6	17.8	3.7	1.8		.6	5.5	2453

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG

HOURS (LST)	TSMS	RAIN E/OF DRIZZLE	FRZING RAIN E/OF DRIZZLE	SNOW E/OF SLEET	HALE	% OBS WITH PRECIP	FOG	SMOKE E/OF HAZE	BLOWING SNOW	DUST E/OF SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02	.7	18.2				18.2	2.3	5.3			7.6	303
03-05		19.7				19.7	5.3	3.0			9.2	304
06-08		25.6			.3	25.6	14.4	1.6			16.0	302
09-11		22.1				22.1	6.6	2.3			9.1	307
12-14		20.3				20.3	2.9	.7		.3	3.9	306
15-17	.3	19.3				19.3	1.0	.7			1.6	306
18-20	.3	19.1				19.1	1.0	.3			1.3	303
21-23		16.6				16.6	1.3	1.0			2.3	307
TOTALS	.1	20.4			.6	20.4	4.5	1.9		.6	6.4	2442

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP

HOURLS (LST)	TSTMS	RAIN E/OR DRIZZLE	FRZING RAIN E/OR DRIZZLE	SNOW E/OR SLEET	HAIL	% OBS WITH PRECIP	FOG	SMOKE E/OR HAZE	BLOWING SNOW	DUST E/OR SAND	% OBS W/CBST TO VISION	TOTAL OBS
00-02		21.4		2.7		24.0	3.1	3.4	.3		6.8	292
03-05		20.7		3.7		24.1	6.1	1.7			7.8	294
06-08		18.6		3.2		21.8	11.9	1.8			13.7	285
09-11		20.0		2.7		22.4	13.9	2.4			16.3	295
12-14		19.2		3.3		21.1	6.5	1.1			7.6	275
15-17		20.1		3.7		25.5	1.7	.7			2.4	294
18-20		23.1		1.4		23.8	.7	1.8			2.5	281
21-23		22.1		2.3	.3	24.7	1.7	2.7			4.3	299
TOTALS		20.8		2.9	.3	23.4	5.7	2.0	.3		7.7	2315

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT

HOURLS (LST)	TSTMS	RAIN E/OR DRIZZLE	FRZING RAIN E/OR DRIZZLE	SNOW E/OR SLEET	HAIL	% OBS WITH PRECIP	FOG	SMOKE E/OR HAZE	BLOWING SNOW	DUST E/OR SAND	% OBS W/CBST TO VISION	TOTAL OBS
00-02		11.7		16.3		27.0	5.0	1.3			6.3	300
03-05		13.7		18.3		30.7	6.9	.7	.3		7.8	306
06-08		13.4		20.7		33.4	7.0				7.0	299
09-11		13.2		20.1		31.0	10.2	.3	.3		10.9	303
12-14		10.9		14.7		24.6	8.5		.3		8.9	293
15-17		13.7		15.3		28.0	5.5	1.0	.3		6.8	307
18-20		11.9		14.3		26.2	6.5	1.0			7.5	294
21-23		14.4		14.1		27.1	5.9	.3	.3	.3	6.9	306
TOTALS		12.8		16.7		28.5	6.9	.6	.2	.0	7.8	2406

GLOBAL CLIMATOLOGY BRANCH
LSAFLTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV

HOURS (LST)	TSTMS	RAIN E/OF DRIZZLE	FRZING RAIN E/OF DRIZZLE	SNOW E/OF SLEET	HAIR	% OBS WITH PRECIP	FOG	SMOKE E/OF HAZE	BLOWING SNOW	DUST E/OF SAND	% OBS W/CBS1 TO VISION	TOTAL OBS
00-02		4.1		32.3		76.1	8.6	1.0	1.0		10.7	291
03-05		2.4		31.6	.3	34.4	8.6	.3	.7	.3	10.0	291
06-08		3.4		35.2	.3	79.0	6.6		.7		7.2	290
09-11		2.4		34.7		36.4	9.5	.3	.7		10.5	294
12-14		3.0		31.6		34.7	11.3	1.4			12.7	291
15-17		2.7		29.1		31.4	11.1	3.0			14.2	296
18-20		3.4	.3	29.1		32.4	8.8	.3	.7	.3	10.1	296
21-23		2.7		30.6		32.7	9.1	.3	.3		9.8	297
TOTALS		3.1	.0	31.8	.1	34.6	9.2	.6	.5	.1	10.7	2346

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC

HOURS (LST)	TSTMS	RAIN E/OF DRIZZLE	FRZING RAIN E/OF DRIZZLE	SNOW E/OF SLEET	HAIR	% OBS WITH PRECIP	FOG	SMOKE E/OF HAZE	BLOWING SNOW	DUST E/OF SAND	% OBS W/CBS1 TO VISION	TOTAL OBS
00-02		.7		36.0	.3	76.6	12.2	.3	.7		13.2	303
03-05		.3		38.0		78.3	12.0	.3	1.6		14.0	306
06-08		.7		35.4		76.0	14.1		.7	.3	15.2	297
09-11		1.0		42.0		42.6	12.5		1.0		13.4	305
12-14		.7		31.9		36.2	17.8	.3	1.6		19.7	304
15-17		.0		35.1		30.7	16.6	.3	1.0	.3	18.2	306
18-20	.3	.7	.7	37.8		36.5	14.1		.3	.3	14.8	304
21-23		1.3	.3	38.0		79.3	13.4	.3	1.0		14.8	305
TOTALS		.0	.0	36.8	.0	77.4	14.1	.2	1.0	.1	15.4	2434

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MUKHOMANSK USSR

PERIOD OF RECORD: 77-87
MONTH: ALL

HOURS (LST)	TSMS	RAIN 6/0R GRIZZLE	FRZING RAIN 6/0H DRIZZLE	SNOW 6/0R SLEET	HAIR	% OBS WITH PRECIP	FOG	SMOKE 6/0R HAZE	BLOWING SNOW	DUST 6/0R SAND	% OBS W/CRST TO VISION	TOTAL OBS
JAN ALL	.0	.1	.1	34.5	.1	34.7	18.7	.6	1.3	.1	20.4	2390
FEB	.1	.7	.1	29.1	.1	29.8	11.5	.6	.9	.1	13.0	2207
MAR		.5	.1	27.3		27.9	12.4	1.4	.5		14.3	2447
APR		3.2	.1	26.1		29.0	4.7	1.5		.0	6.3	2351
MAY		10.1		13.3	.0	23.1	3.8	2.1			5.9	2438
JUN	.0	16.4		6.9	.2	23.0	3.0	1.3		.0	4.3	2362
JUL	.2	17.8			.0	17.8	3.7	1.9		.0	5.5	2453
AUG	.1	20.4			.0	20.4	4.5	1.9		.0	6.4	2442
SEP		20.8		2.9	.0	23.4	5.7	2.0	.0		7.7	2315
OCT		12.6		16.7		28.5	6.9	.6	.2	.0	7.6	2408
NOV		3.1	.0	31.8	.1	34.6	9.2	.8	.5	.1	10.7	2346
DEC	.0	.8	.1	36.8	.0	37.4	14.1	.2	1.0	.1	15.4	2434
TOTALS	.1	8.9	.0	18.8	.0	27.5	8.2	1.2	.3	.0	9.8	28593

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SEE SUPPLEMENTAL SECTION (SUMMARY OF DAY DATA) FOR THESE SUMMARIES.

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BIVARIATE PERCENTAGE FREQUENCY TABULATIONS OF SURFACE WINDS

DATA DERIVED FROM HOURLY DATA.

PRESENTED ARE THE PERCENTAGE FREQUENCY OF WIND DIRECTION TO 16 COMPASS POINTS, CALM AND VARIABLE VERSUS WIND SPEED IN KNOTS IN INCREMENTS OF BEAUFORT CLASSIFICATIONS.

PERCENTAGES ARE SHOWN BY BOTH DIRECTIONS AND SPEED, AND IN ADDITION THE MEAN WIND SPEED IS GIVEN FOR EACH DIRECTION.

DATA PRESENTED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

A SEPARATE ANNUAL TABLE PRESENTS THE SAME BIVARIATE DISTRIBUTIONS WITH IMPOSED CEILING/VISIBILITY LIMITATIONS: WHEN VISIBILITY IS EQUAL TO OR GREATER THAN 1/2 MILES, THE CEILINGS ARE 200 TO 1400 FEET AND/OR WHEN THE CEILING IS EQUAL TO OR GREATER THAN 200 FEET, THE VISIBILITIES ARE 1/2 THROUGH 2 1/2 MILES.

A PERCENTAGE VALUE OF ".00" IN THESE TABLES INDICATES ONE OR MORE OCCURRENCES AMOUNTING TO LESS THAN .05%.

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN HOURS(LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			56-60
N		.3		1.0	.3							1.7	13.0
NNE		.3	.7	.3								1.4	10.0
NE	.3	.7										1.0	4.0
ENE		.7	.3	.3								1.4	7.0
E	.3											.3	2.0
ESE			.3									.3	10.0
SE													
SSE		.7	.3	.3								1.4	8.0
S	1.4	8.0	17.0	16.7	3.1	1.4						48.3	10.7
SSW		7.0	9.5	9.2	2.0	.3						28.0	10.2
SW		.7	.7	1.4	.3	.3						3.4	12.8
WSW		.3										.3	6.0
W	.3			1.4	1.4	.3						3.4	15.1
WNW			.7	1.0	.7							2.4	14.3
NW			.3	1.4	.7							2.4	14.3
NNW			1.0	.3	.3	.3						2.0	14.7
VARIABLE													
CALM	////////////////////////////////////										1.4	////	
TOTALS	2.4	20.4	31.0	33.3	8.8	2.7					100.0	10.7	

TOTAL NUMBER OF OBSERVATIONS: 294

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STAT ON NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN HOURS(IST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N				1.0	1.0							2.0	15.8
NNE	.7	.7	.7	.3								2.3	6.9
NE	.3	.3	.3									1.0	6.0
ENE		.7		.3								1.0	8.7
E	.3	.7										1.0	3.3
ESE		.7	.3									.7	7.0
SE		.3										.3	4.0
SSE		.7	1.3	.3								2.3	8.9
S	1.7	10.3	14.0	18.3	4.0	.3						48.5	10.5
SSW	1.0	3.3	10.0	8.6	2.0	.3						25.2	10.6
SW		.7	.7	1.0	1.0	.3						3.7	14.0
WSW		1.0		.3	.7							2.0	11.7
W			.3	1.7	1.3	.3						3.7	16.8
WNW			1.0	.3	.3	.3						2.3	13.7
NW				.7								.7	14.0
NNW		1.3		.7	.3							2.3	9.6
VARIABLE													
CALM	////////////////////											1.3	////
TOTALS	4.0	20.7	28.6	32.6	10.6	1.7						100.0	10.6

TOTAL NUMBER OF OBSERVATIONS: 301

GLOBAL CLIMATOLOGY BRANCH
USAF LTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MUHMANSK LSSR

PERIOD OF RECORD: 78-87
MONTH: JAN HOURS (LST): 0600-0600

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.3	.3	.3	1.0	.3	.3					2.7	13.3
NNE	.3		.3	1.0							1.7	10.0
NL		.7	1.0								1.4	7.0
NNE	.3	.3									.7	4.0
E		.3									.3	4.0
ESE	.7	.3	.3								1.0	4.7
SE		1.0									1.0	5.3
SSE		.3	.3	1.4							2.1	13.3
S	1.4	12.4	12.0	14.4	3.4	.3					44.0	10.2
SSW	1.0	4.1	12.4	10.3	1.7						29.6	10.5
SW		1.7	1.0	.7	1.4						4.8	10.6
WSW			.7	.7	.3						1.7	13.0
W			.7	1.4	.3	.7					3.1	16.1
WNW		.7		1.7							2.1	12.3
NW	.3			.7							1.0	8.7
NNW			1.0	.3	.7						2.1	13.0
VARIABLE												
CALM	////////////////////////////////////										.7	////
TOTALS	4.1	21.6	30.2	33.7	8.2	1.4					100.0	10.5

TOTAL NUMBER OF OBSERVATIONS: 291

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN HOURS(LST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7					.3					.7	14.5
NNE		.7	.7		.3						1.7	9.0
NE			.7	.3	.3						1.3	12.3
ENE	.3	.7									1.0	3.3
E	.7	.3									.7	3.0
ESE												
SE		.3	.7								1.0	8.0
SSE		1.0	.3		.7	.3					2.3	12.4
S	.7	11.0	16.7	14.0	4.3						46.8	10.2
SSW	1.0	6.0	9.0	9.0	1.3	.3					26.8	9.9
SW		1.3	.7	1.0	1.7						4.7	12.4
WSW		.7	.7	1.3							2.3	12.0
W				1.0	1.3						2.3	17.4
WNW			1.3		.3						1.7	11.8
NW		.7	.3	1.3	.3						2.0	12.5
NNW		.7	.3	1.3	.3	.3					3.0	13.3
VARIABLE												
CALM	////////////////////										1.7	////
TOTALS	2.7	22.7	31.4	29.1	11.0	1.3					100.0	10.4

TOTAL NUMBER OF OBSERVATIONS: 299

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN HOURS (LST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.7		.7	1.0	.3							2.8	10.1
NNE	.3	.3		.3								1.0	7.3
NE	.3	1.0	.3	.3								2.1	7.3
NNE		1.0										1.0	4.0
E			1.0									1.0	8.0
ESE													
SE													
SSE	.3	1.0	.3	.7								2.4	6.0
S	.7	10.7	21.7	13.1	2.4	1.7						49.3	10.3
SSW	1.0	5.5	8.3	7.2	1.0	1.0						24.1	10.3
SW		1.4	1.7	.3	.7							4.1	9.2
WSW	.3		.3	1.0	.3	.3						2.4	12.9
W		.3	.7	.7	.7	.7						3.1	15.3
WNW				1.4	.7							2.1	16.3
NW		.3	.3	1.0								1.7	10.8
NNW		.7	.3									.7	8.0
VARIABLE													
CALM	////////////////////											2.1	////
TOTALS	3.4	22.1	35.9	27.2	6.2	3.1						100.0	10.1

TOTAL NUMBER OF OBSERVATIONS: 290

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201150 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN HOURS(EST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.4		1.0	.6	.6						2.6	11.5
NNE		.6	.7								1.0	5.3
NE		1.7	.7								1.3	6.5
NNE	.3	.6	.7								1.3	5.5
E												
ESE	.7		.3								.6	5.0
SE												
SE		.7	.2	.6							1.3	9.0
S	2.0	1.9	4.1	1.9	1.6	.6					59.3	10.1
SSW	.6	1.9	8.1	1.8	.7						24.7	9.9
SW	.6	1.9	.3	1.5	.6						4.9	8.7
WSW		.7		1.0		.3					1.6	15.0
W		.7	1.7	1.6	.3		.6				3.9	15.3
WNW			.3	1.0	.3						1.6	14.2
NW			.6	.6	.3						1.6	13.0
NNW	.7		1.0	.6	.3						2.3	10.7
VARIABLE												
CALM	////////////////////////////////////										1.0	////
TOTALS	5.1	12.5	34.1	33.1	5.5	1.7	.6				100.0	10.1

TOTAL NUMBER OF OBSERVATIONS: 308

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 211130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN HOURS(IST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N				.7	.3							1.0	15.7
NNE		.7	.3	.7								1.7	10.4
NE	.3	1.0	.7									2.0	6.0
ENE	.7	1.4	.3									2.4	4.3
E	.3											.3	2.0
ESE				.7								.7	14.0
SE													
SSE				.3	.3	.3						1.0	20.0
S	1.7	10.2	15.6	14.6	2.4	1.0	.3					49.8	10.4
SSW	.3	6.8	7.1	0.5	2.4	.3						25.4	10.4
SW		1.7	.7	1.4	.3							4.1	8.9
WSW	.3			.3	.3	.3						1.4	14.0
W			.7	1.4	1.4	.7						3.4	16.9
WNW			.3	1.4	.3							2.0	13.2
W			1.0	.3								1.4	10.0
WNW			.7	.7	.3							1.7	12.6
VARIABLE													
CALM	////////////////////											1.7	////
TOTALS	3.7	20.7	27.1	30.9	8.1	2.4	.3					100.0	10.4

TOTAL NUMBER OF OBSERVATIONS: 295

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201150 STATION NAME: MURMANSK LSSR

PERIOD OF RECORD: 78-87
MONTH: JAN HOURS(LST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N			.3	1.0								1.3	13.5
NNE	.3	.7	1.0		.3							2.3	8.1
NE		1.0		.7								1.3	8.0
NNE													
E													
ESE													
SE													
SSE		1.6	.3	.7	.7							2.9	9.6
S	1.7	12.1	17.6	13.7	3.3	.7						48.5	9.9
SSW	1.0	4.6	11.1	7.2	3.3							27.0	10.3
SW		1.3	1.0	1.3	1.6							5.2	12.4
WSW		.3		.7	.7	.3						2.0	15.5
W		.7		1.0	2.0							3.3	16.4
WNW		.3	.3	1.0		.3						2.0	13.5
NW				1.3	.7							2.0	14.7
NNW			.3	.7	.7							1.3	14.0
VARIABLE													
CALM	////////////////////////////////////											1.0	////
TOTALS	2.7	22.1	31.9	28.0	13.0	1.3						100.0	10.5

TOTAL NUMBER OF OBSERVATIONS: 707

GLOBAL CLIMATOLOGY BRANCH
USAF/TAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MORMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN HOURS(LST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.2	.1	.3	.2	.4	.1					1.8	12.9
NNE	.2	.5	.5	.3	.1						1.6	8.5
NE	.2	.7	.4	.1	.0						1.4	7.2
ENE	.2	.7	.1	.1							1.1	5.2
E	.2	.2	.1								.5	4.4
ESE	.1	.1	.2	.1							.4	7.6
SE		.2	.1								.3	6.3
SSE	.1	.7	.4	.5	.2	.1					2.0	10.4
S	1.4	10.6	16.9	15.7	3.1	.7	.0				48.2	10.3
SSW	.9	5.4	9.4	8.7	1.9	.3					26.5	10.3
SW	.1	1.3	.8	1.0	1.0	.1					4.4	11.0
WSW	.1	.3	.2	.7	.3	.2					1.7	13.1
W	.0	.1	.4	1.3	1.1	.3	.1				3.3	16.1
WNW		.1	.5	1.0	.3	.1					2.0	13.7
NW	.7	.1	.3	.5	.3						1.6	12.5
NNW	.7	.7	.6	.5	.4	.1					1.9	12.2
VARIABLE												
CALM	////////////////////////////////////										1.3	////
TOTALS	3.5	21.0	31.3	31.7	9.0	1.9	.1				100.0	10.4

TOTAL NUMBER OF OBSERVATIONS: 2365

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS (LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-7	8-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.4		.4		.4						1.1	10.3
NNE				.4							.4	14.0
NE		.4		.4							.7	9.0
NNE		.7			.4						1.1	9.0
E	.4	.4	.7	.4							1.9	7.2
ESE												
SE	.4			.4							.7	8.0
SSE		1.1	1.1	.7							3.0	8.3
S	.4	7.4	13.0	15.6	3.7	.4					40.5	10.9
SSW	.4	4.5	9.7	11.2	1.9	.4					27.9	10.9
SW		1.9	.7	1.5	.7	.4					5.2	11.2
WSW				.7	.4						1.1	15.0
W				1.9	2.2						4.1	16.4
WNW			1.1	3.0	1.5	.4					5.9	13.9
W		.4	.7	.7	.4		.4				2.6	14.3
NNW			.7	.7	.7						2.2	14.0
VARIABLE												
CALM	////////////////////////////////////										1.5	////
TOTALS	1.4	16.7	29.3	37.5	12.3	1.5	.4				100.0	11.2

TOTAL NUMBER OF OBSERVATIONS: 269

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 79-87
MONTH: FEB HOURS(LST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.4	.4		1.1	.4						2.2	10.8
NNE	.4	.4	.4								1.1	4.7
NE	.4		.7								1.1	7.3
ENE		.7	.4	.4							1.4	7.5
E		.4			.4						.7	10.5
ESE												
SE			.4								.4	10.0
SSE			.4	.4							.7	12.0
S	1.8	2.2	16.2	14.4	4.3						39.9	11.0
SSW	.7	5.6	14.4	10.8	2.5						34.2	10.2
SW	.4			1.1	1.1						2.5	14.4
WSW	.7		.4	1.1	.4	.4					2.9	12.8
W		.4	.4	1.4	1.4	.4					4.0	15.4
WNW			.4	2.5	.4	.7					4.0	15.4
NW		.4	.4	1.1	.7		.4				2.9	14.4
NNW			.4	1.1							1.4	13.0
VARIABLE												
CALM	////////////////////////////////////										.7	////
TOTALS	4.7	11.5	34.5	35.3	11.5	1.4	.4				100.0	11.1

TOTAL NUMBER OF OBSERVATIONS: 276

GLOBAL CLIMATOLOGY BRANCH
USAF/TAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS(IST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N		.4		1.1								1.5	12.5
NNE				.4								.4	12.0
NE		.4	.4	.7								1.5	10.5
NNE	.4		.4									.7	6.0
E	.4	.4	.7									1.5	5.5
ESE													
SE		.4	.4									.7	6.0
ESE	.4	.7	1.1	.4	.4							2.9	8.9
S	.7	7.4	14.0	17.3	3.7	.4						43.4	11.0
SSW	.4	2.6	11.4	11.4	1.1							26.8	10.9
SW	.4	.7	.7	.7	.7							3.3	10.0
WSW	.4	.7	.4	.4	.7	.4						2.9	11.4
W				3.3	1.1	.7						5.1	16.5
WNW			.7	1.8	.4							2.9	13.1
NW			.4	1.5	.4		.4					2.6	15.7
NNW		.4	.4	1.1								1.8	11.6
VARIABLE													
CALM	////////////////////											1.8	////
TOTALS	2.9	14.0	30.9	40.1	8.5	1.5	.4					100.0	11.0

TOTAL NUMBER OF OBSERVATIONS: 272

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS(IST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N				.4	.4	.4					1.1	20.7
NNE	.4			.4							.7	7.0
NE		.4	.7								1.1	7.3
ENE			.4								.4	10.0
E	.4		.7	.4							1.5	8.6
ESE	.4	.4									.7	3.0
SE		1.1									1.1	4.7
SSE		.7	.4	1.1							2.2	10.0
S	.7	5.1	15.4	17.6	4.4	.7					44.1	11.3
SSW		2.2	12.1	11.4	1.8						27.6	10.8
SW		.7	.7	.7	.4						2.6	10.4
WSW			.4		.4	.4					1.1	18.0
W			1.1	1.5	2.2	.4		.4			5.5	16.9
WNW		.4	.4	1.5	1.5						3.7	14.4
NW		.4	.7	1.1	.4						2.6	12.4
NNW	.4		.7	.7		.4					2.2	13.2
VARIABLE												
CALM	////////////////////										1.8	////
TOTALS	2.2	11.4	33.8	36.8	11.4	2.2		.4			100.0	11.3

TOTAL NUMBER OF OBSERVATIONS: 272

GLOBAL CLIMATOLOGY BRANCH
LSAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS (LST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.4	.4	.4	.4								1.4	7.0
NNE		.7	.4									1.1	6.0
NE		.7		.4								1.1	7.3
ENE													
E			1.4									1.4	9.0
ESE													
SE	.4	.7	.4									1.4	5.0
SSE	.4	1.1		.4								1.8	6.4
S	.7	5.0	13.6	16.8	2.9	.4	.4					39.6	11.5
SSW	.4	5.7	10.7	12.1	4.3	.4						33.6	11.4
SW		.7	.4	1.8	.7							3.6	12.8
WSW				.4	1.1							1.4	18.3
W		.4		7.5	2.1	.4						5.4	15.4
WNW			.7	.7	.7							2.1	14.3
NW			.4	1.4	.4							2.1	14.2
NNW		.4	.4	1.1	1.1							2.9	13.9
VARIABLE													
CALM	////////////////////											1.1	////
TOTALS	2.1	15.7	28.6	37.9	13.2	1.1	.4					100.0	11.5

TOTAL NUMBER OF OBSERVATIONS: 230

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM POLARLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS(LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N		.4	.4	.4	.4							1.4	10.3
NNE			.4	.4								.7	13.0
NE		.4	.4									.7	6.0
ENE			.4									.4	10.0
E		.4	.7		.4							1.4	10.3
ESE		.4										.4	4.0
SE		.7										.7	5.0
SSE	.4	1.4	.4	.4	.4							2.9	8.1
S		9.1	13.0	13.8	5.8	.4						42.0	11.0
SSW	.4	5.8	9.4	9.1	5.1							29.7	11.1
SW		.7	.7	.7								2.2	8.7
WSW				1.8	.4	.7						2.9	17.4
W		.4	.7	1.4	1.8	.4						4.7	15.2
WNW		1.1		1.8	1.1	.4						4.3	13.3
NW		.4		1.1	.7							2.2	13.3
NNW			.4	.4	1.1							1.8	16.2
VARIABLE													
CALM	////////////////////////////////////											1.4	////
TOTALS	.7	21.0	26.8	31.2	17.0	1.8						100.0	11.2

TOTAL NUMBER OF OBSERVATION: 276

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM POLARLY OBSERVATIONS

STATION NUMBER: 22113 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS (LST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N		.4			.4							.7	10.5
NNE	.7			.4								1.1	5.3
NE		.4										.4	6.0
ENE	.4			.4								.7	9.0
E	.7	.4	1.1	.7								2.9	7.5
ESE		.4		.4								.7	10.0
SE		.4										.4	4.0
SSE		.4	1.5	.7	.4							2.9	11.1
S	1.1	7.3	9.5	15.7	3.6	.4						37.6	10.9
SSW	1.1	5.5	8.4	10.6	3.6	.7						29.9	11.4
SW		2.2		1.1	.4							3.6	8.5
WSW			.4	1.1	.7							2.2	15.3
W	.4	.4	.4	1.8	1.5	.7	.4					5.5	16.2
WNW			1.5	1.5		.4						3.3	13.4
NW		.4	.7	1.1	.4	.7						3.3	13.9
NNW			1.1	1.1	1.1	.4						3.6	15.6
VARIABLE													
CELM	////////////////////////////////////											1.1	////
TOTALS	4.4	17.7	24.5	36.5	12.0	3.3	.4					100.0	11.4

TOTAL NUMBER OF OBSERVATIONS: 274

GLOBAL CLIMATOLOGY BRANCH
USAF/FLAC
AIR WEATHER SERVICE/PAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271150 STATION NAME: MUHOMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS(IST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-7	8-16	17-21	22-27	28-33	34-40	41-47	48-55	56-63	64-73		
N	.4	.4	1.1	.7							2.5	9.1
NNE		.4	.4								.7	7.0
NE				.4							.4	12.0
NNE	.4	.4	.4	.4							1.4	7.0
E		1.1									1.1	4.0
ESE		.4	.4								.7	8.0
SE		.7	.4								1.1	5.3
SSE		.7	1.1	1.1							2.9	9.3
S		7.2	13.0	14.8	4.0	1.1					40.1	11.4
SSW		4.7	9.7	9.7	2.2						26.4	10.7
SW	.4	.4	2.5	1.8	.4	.4					5.8	11.5
WSW	.4			1.4							1.8	12.4
W			.7	1.1	1.4	.4					3.6	15.7
WNW			1.1	2.5	.4	.7					4.7	14.8
NW			.4	1.1	.4	1.1					2.9	18.0
NNW		.7	.4	1.4	.4						2.9	12.1
VARIABLE												
CALM	////////////////////////////////////										1.1	////
TOTALS	1.4	17.2	31.0	36.1	9.7	3.6					100.0	11.3

TOTAL NUMBER OF OBSERVATIONS: 277

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221157 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS(IST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.2	.2	.3	.4	.3	.0					1.5	11.0
NNF	.2	.2	.2	.2							.8	7.5
NF	.3	.3	.3	.2							.9	8.2
FNE	.1	.2	.2	.1	.0						.8	7.9
E	.0	.4	.7	.2	.1						1.5	7.7
ESE	.0	.2		.1							.3	6.6
SE	.1	.5	.2	.0							.8	5.7
SSE	.1	.8	.7	.6	.1						2.4	9.1
S	.7	6.5	13.5	15.7	4.0	.5	.0				40.9	11.1
SSW	.4	4.6	10.7	10.8	2.8	.2					29.5	10.9
SW	.1	.2	.7	1.2	.5	.1					3.6	11.0
WSW	.0	.1	.2	.9	.5	.2					2.0	14.6
W	.0	.2	.4	1.9	1.7	.4	.0	.0			4.7	16.0
WNW		.2	.7	1.9	.7	.3					3.9	14.1
NW		.2	.5	1.1	.5	.2	.1	.0			2.6	14.6
NNW	.0	.2	.5	1.0	.5	.1					2.4	13.8
VARIABLE												
CALM	////////////////////										1.3	////
TOTALS	2.5	15.7	29.8	36.4	12.0	2.0	.2	.1			100.0	11.2

TOTAL NUMBER OF OBSERVATIONS: 2158

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 7A-87
MONTH: MAR HOURS(LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-7	8-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-63	64-70		
N	.3	1.7	1.7	.3	.3							4.3	7.9
NNE		1.7	.7	.3								3.0	6.2
NF		1.3	.3									2.6	5.0
NNE	.3	.7	.3									1.0	4.7
E	.3	1.0		1.0								2.3	8.6
ESE	.3											.3	2.0
SE	.3	.7	.3									1.3	4.5
SSE	.7		.7	1.3	.3							3.0	10.3
S	1.7	11.0	13.5	10.2	3.6	.3						41.3	9.4
SSW	.7	7.7	8.6	5.3	1.7	.3						23.4	9.8
SW	.7	.7	.7	1.3	1.0							4.3	11.0
WSW		.3	.3	.3	.7							1.7	13.2
W			.3	.7	.3	.3						1.7	15.6
WNW	.3		.7	1.3	.3							2.6	11.6
W	.7	.7	1.0	.7		.3						3.0	10.3
NNW		1.7	.3	1.0		.3						3.0	9.9
VARIABLE													
CALM	////////////////////											1.3	////
TOTALS	5.6	30.0	29.4	23.0	8.3	1.7						100.0	9.3

TOTAL NUMBER OF OBSERVATIONS: 303

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS(IST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.0	2.0	.3	1.0		.3					4.6	7.8
NNE	.7	2.0	.7								3.9	4.4
NE	.7	.3	.3	.7							1.6	8.8
ENE	.7	.3		.3							1.0	6.0
E		1.0	.7	.3	.3						2.3	8.7
ESE	.2	.7	.3								1.3	5.5
SE		.3	.7	.3							1.0	6.7
SSE	.3	1.0	.7	1.0	.3						3.9	10.4
S	2.6	10.4	14.7	6.7	3.3						39.5	9.0
SSW	.3	7.0	9.8	4.9	1.3	.3					24.2	9.4
SW	.7	1.0	.7	1.0	.7						3.6	10.5
WSW		.3	.3	1.0	.3						2.0	12.2
W			.3	.7	.7	.3					2.0	16.2
WNW		.3	.7	1.0							2.0	11.7
WW	.7	.7	.7	.3	.3	.3					2.6	10.5
NNW	.3	1.7	1.0	.7	.3						3.6	8.5
VARIABLE												
CALM	////////////////////////////////////										1.0	////
TOTALS	6.6	30.4	31.4	21.9	7.5	1.3					100.0	9.1

TOTAL NUMBER OF OBSERVATIONS: 306

GLOBAL CLIMATOLOGY BRANCH
JSAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 74-87
MONTH: MAR HOURS(IST): 0600-0600

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-66	
N	.3	3.7	.3	.7							4.6	6.3
NNE	1.6	1.7	1.0								3.6	4.9
NE		1.3	.3								1.6	6.4
ENE	.7	.7	.3	.7							2.3	6.6
E	.3	.7	.7	.7							2.3	8.0
ESE	.7		.3								.7	5.0
SE	.3			.7							.7	7.0
SSE		.7	.7	.3							1.3	9.0
S	1.6	7.6	13.5	11.5	2.0						36.2	9.8
SSW	1.6	1.2	13.2	5.9	2.0						32.2	8.9
SW	.7	1.0	.7	.3	.3						3.0	8.3
WSW		.7	.3	.3							1.3	8.5
W		1.3		.3		.7					2.3	11.7
WNW		.7	.3	2.0	.3						3.2	12.3
NW	.3	.7	.3	1.3	.3						3.0	10.6
NNW		1.0		.3							1.3	8.0
VARIABLE												
CALM	////////////////////////////////////										.7	////
TOTALS	7.2	24.9	31.9	24.7	4.9	.7					100.0	8.9

TOTAL NUMBER OF OBSERVATIONS: 794

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS(IST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	.7		.3							1.3	6.0
NNE		1.3	.3	.3	.3						2.3	8.4
NE		1.3	.7								1.6	6.4
ENE	.3	2.7	1.7	.7							4.6	7.1
E	.7	.7	.7	.7							2.3	7.1
ESE												
SE				.3							.3	12.0
SSE		.7	.3	1.3							2.3	10.3
S	2.7	12.5	17.0	12.7	2.6						44.8	9.6
SSW	1.7	7.2	10.1	6.2	1.6						26.1	9.3
SW		.3	1.0	1.0	.7						2.9	12.0
WSW		.3									.3	6.0
W	.7		.3	.7	.3	.3					2.0	13.7
WNW		.3	.7	2.7		.3					2.9	13.9
W		.7	.2	.3							1.0	10.0
WNW	.3	2.0		1.0							3.3	7.4
VARIABLE												
CALM	////////////////////										2.0	////
TOTALS	4.4	27.0	32.0	27.5	5.6	.7					100.0	9.3

TOTAL NUMBER OF OBSERVATIONS: 706

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAL

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MUKMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS(LST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.3	.7		.7	.3						2.0	8.8
NNE		1.3	.3	.3							2.0	6.3
NE		1.0	1.3	.3							2.7	8.3
NNE		.7	1.3								1.7	8.0
E		.7	.7	.7							2.0	9.3
ESE		.7		.3							.7	9.0
SE	.3	.7	.3								1.3	5.0
SSE	.3	1.0	1.0	1.0							3.3	8.4
S	2.3	10.7	13.0	12.7	3.3						43.1	9.9
SSW	1.7	7.4	6.0	8.7	.7	.3					24.7	9.2
SW		.7	2.3	1.7		.3					5.0	11.4
WSW	.3			.7							1.0	9.3
W				.7	.7						1.3	16.0
WNW		.7		1.0	.7	.3					2.3	15.6
NW	.7	.3	.7	.7							2.0	8.0
NNW	.7	1.0		.7	.3						2.7	8.4
VARIABLE												
CALM	////////////////////////////////////										2.0	////
TOTALS	6.4	26.4	27.1	31.1	6.0	1.0					100.0	9.4

TOTAL NUMBER OF OBSERVATIONS: 299

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271150 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS(EST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.3	2.3	.3	1.0	.3						4.3	7.9
NNE		1.3	1.0	.3							2.6	7.5
NE		1.0	1.0								2.0	7.0
NNE		1.0	1.3								2.6	6.8
E		.7	1.3	.7							2.6	8.5
ESE		1.3									1.3	5.0
SE		.3		.3							.7	8.0
ESE	.3	2.0	1.6	1.3							5.2	7.8
S	1.3	9.8	8.2	12.9	3.9	.3					36.4	10.5
SSW	1.3	4.6	5.6	4.2	3.6						19.0	10.4
SW		1.0	1.3	4.9	.7						8.9	11.4
WSW		.7	1.3	1.3							3.3	10.4
W		.7	.3	1.0	.7	.3					3.0	13.9
WNW			.3	1.0	.7	.3					2.3	16.1
NW	.3	.3	.3	1.3							2.3	10.3
NNW		1.0	.3	.7	.3						2.3	9.6
VARIABLE												
CALM	////////////////////////////////////										1.3	////
TOTALS	3.3	29.2	24.3	30.8	10.2	1.0					100.0	10.0

TOTAL NUMBER OF OBSERVATIONS: 705

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MERMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS(IST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N		1.6	1.0	1.3	.3						4.2	9.6
NNE	.3	1.0	.3	.3							2.0	6.7
NE		1.0	.3								1.3	6.5
ENE		2.0	1.6	.3							3.9	6.8
E	1.0	1.0	1.3	.7							4.6	6.6
ESE	.3	1.0	.7								2.0	5.7
SE		.3	.7								1.0	8.0
SSE	1.0	2.0	1.6	1.0							5.5	7.1
S	.7	6.6	6.8	10.7	2.6	.7					33.9	10.6
SSW	1.0	4.9	4.2	7.6	1.3	.3	.3				19.5	10.7
SW	.3	1.3	2.3	2.0	.7						6.5	10.3
WSW	.7	1.0	.3	1.3							2.9	9.1
W	.7	.7	.7	.7	1.3						3.3	13.0
WNW			.3	1.0	.7						2.0	14.0
NW	.7	.7	.7	1.0	.3						2.9	10.1
NNW		1.6	.3	1.3							3.3	9.8
VARIABLE												
CALM	////////////////////										1.3	////
TOTALS	5.5	26.7	25.1	30.9	7.2	1.0	.3				100.0	9.7

TOTAL NUMBER OF OBSERVATIONS: 307

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS(UT): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.3	1.3	.7	1.3			.3					3.9	10.1
NNE		1.3		.7								2.0	7.3
NE	.3	3.3	.7		.3							4.2	6.3
ENE	.7	.7	.3									1.6	4.0
E		1.3	.3	1.0								2.6	8.8
ESE	.3	.3	.7									1.0	5.3
SE		1.0	.3									1.3	6.5
SSE	.7	2.0	1.0	1.0	.3							4.6	8.4
S	1.0	3.0	12.7	10.5	3.3	1.0	.3					36.9	10.5
SSW	1.3	8.2	7.5	4.9	.7	.3						22.9	8.8
SW	.3	.7	.7	1.6	1.3							4.6	12.6
WSW			.3	.3								.7	11.0
W	.3	.7		.7	1.0	.7						2.9	12.9
WNW	.7	.7	.7	.7	.3							2.6	9.1
NW		.7	.2	2.0								2.9	11.8
NNW	.3	.7	.3	.7	.3							2.3	9.3
VARIABLE													
CALM	////////////////////											2.9	////
TOTALS	5.9	30.4	25.8	25.2	7.5	1.6	.7					100.0	9.3

TOTAL NUMBER OF OBSERVATIONS: 706

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS(IST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.4	1.7	.5	.0	.2	.0	.0				3.7	8.2
NNE	.2	1.5	.5	.3	.0						2.7	6.3
NE	.1	1.4	.5	.1	.0						2.2	6.7
ENE	.3	1.0	.8	.2							2.3	6.6
E	.3	.9	.7	.7	.0						2.6	8.0
ESE	.2	.5	.2	.5							.9	5.5
SE	.1	.4	.2	.2							.9	6.8
SSE	.4	1.1	.9	1.1	.1						3.7	8.7
S	1.6	7.7	12.7	11.5	3.1	.3	.0				39.0	9.9
SSW	.9	7.1	8.1	6.0	1.6	.2	.0				24.0	9.5
SW	.3	.9	1.2	1.7	.7	.0					4.8	11.0
WSW	.1	.4	.4	.7	.1						1.6	10.4
W	.1	.4	.2	.7	.6	.3					2.3	13.8
WNW	.1	.2	.4	1.2	.4	.1					2.5	13.0
NW	.2	.5	.5	.9	.1	.1					2.5	10.3
NNW	.2	1.2	.3	.9	.2	.0					2.7	8.7
VARIABLE												
CALM	////////////////////										1.6	////
TOTALS	5.7	29.1	28.4	27.0	7.1	1.1	.1				100.0	9.4

TOTAL NUMBER OF OBSERVATIONS: 2436

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM POLARLY OBSERVATIONS

STATION NUMBER: 221137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS(LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.3	5.1	2.4	1.7	.3						8.0	8.6
NNE	.3	3.1	1.0	.7	.3						5.6	7.1
NE		2.8	1.0	1.4							5.2	8.3
ENE	.3	1.4									1.7	4.0
E	.7	1.4	.3								2.4	4.6
ESE												
SE		.3	.3								.7	6.0
SSE	.7	.7	.3	.3							2.1	6.0
S	1.4	9.1	8.4	6.3	.7						25.9	8.8
SSW	1.0	7.7	4.5	3.5	1.0						17.8	8.3
SW	.3	1.4	2.4								4.2	7.0
WSW		.7	.3	1.0							2.1	10.3
W	.3	.3		1.4	.7						2.8	12.5
WNW		1.0	2.1	4.2							7.3	11.0
NW	.7	2.1	2.8	.7							6.3	7.6
NNW	.7	.3	1.7	1.4							4.2	8.8
VARIABLE												
CALM	////////////////////										3.8	////
TOTALS	7.0	31.5	27.9	22.6	3.1						100.0	8.1

TOTAL NUMBER OF OBSERVATIONS: 287

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221150 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 79-87
MONTH: APR HOURS(LST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	3.0	3.0	2.4	.3						9.4	8.8
NNE	.3	2.0	1.3	.3							4.0	7.0
NE		1.7	.3	.7	.7						3.4	10.2
ENE	.3	1.7	.7	.3							3.0	6.2
E	.3	.7									1.0	3.2
ESE												
SE		.3	.3								.7	7.0
SSE		1.0	1.3	.7	.3						3.4	9.7
S	2.7	6.9	9.4	6.4	.7	.3					28.3	8.4
SSW	.3	9.1	7.1	2.0							17.5	7.5
SW	.7	1.3	1.3	1.0	.3						4.7	8.5
WSW	.3	.3				.3					1.0	9.7
W	.7	.7	1.3	1.3	.7						4.7	10.1
WNW		.7	.7	2.0							3.4	11.6
NW		.7	2.4	2.7	.3						5.1	11.7
NNW	.3	2.0	1.0	1.7							5.1	8.1
VARIABLE												
CALM	////////////////////////////////////										5.4	////
TOTALS	6.7	32.7	30.2	24.9	3.4	.7					100.0	8.1

TOTAL NUMBER OF OBSERVATIONS: 297

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201133 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS (LST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	3.4	2.7	1.7	.3						8.5	6.4
NNE	1.0	.3	.7	1.4	.3						3.4	9.5
NE	.7	1.7	.7	.3	.7						4.1	8.3
NNE		1.7		.3							2.0	5.7
E	.7			.3							1.0	6.0
ESE	.7	.3									.7	3.0
SE		1.0									1.0	5.3
SSE		.7	1.0	.7							2.4	9.1
S	2.0	11.9	9.9	3.4	.3	.3					28.0	7.5
SSW	1.7	7.5	9.2	4.6	.3	.3					23.9	8.5
SW	.7	.7	.3	1.4							3.1	9.1
WSW		.7									.7	4.0
W	.3		.7	1.4	.7						3.1	13.1
WNW		.7	1.7	1.0							3.4	9.6
NW			3.1	1.7	.3						5.1	10.7
NNW	.7	2.4	1.7	1.7	.3						6.5	8.4
VARIABLE												
CALM	////////////////////										2.7	////
TOTALS	8.2	33.1	31.7	20.1	3.4	.7					100.0	8.1

TOTAL NUMBER OF OBSERVATIONS: 273

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MPC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 7R-87
MONTH: APR HOURS(LST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	2.0	1.7	2.0	2.4	.7						8.8	8.5
NNE	1.4	.7	1.0	1.7	1.0						5.8	10.3
NE	.3	1.4	.7	.7							2.7	8.0
NNE	.3	.7	.7	.3	.3						2.4	9.0
E	.3	.3	.7	.3							1.7	6.8
ESE	.7	.7	.3								1.0	6.0
SE												
SEF	.3	1.4	.3	.3							2.4	7.4
S	1.7	0.6	10.6	8.6	.3						28.2	9.1
SSW	2.4	5.6	6.8	3.7	1.0	.3					20.1	8.6
SW	.7	1.4	.7	1.4							4.1	8.0
WSW	.7	.7		.7							1.4	8.0
W	.3	1.7	.7	1.7	.3						4.8	9.8
WNW	.7	.7	.7	1.4	.7						3.9	12.0
NW	1.0	1.0	2.0	.3							4.4	6.7
NNW	.3	1.7	1.7	1.4	1.0						6.1	9.7
VARIABLE												
CALM	////////////////////										2.7	////
TOTALS	12.4	25.5	28.6	25.2	5.4	.3					100.0	8.6

TOTAL NUMBER OF OBSERVATIONS: 294

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS (LST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.3	3.1	2.1	4.2	.3						10.0	9.8
NNE	.7	.7		1.7	1.0						3.8	11.4
NE		1.4	1.7	1.7	.7						4.8	10.3
ENE		.7	1.7	.7							3.1	7.1
E	.3	.7	.7								1.7	5.2
ESE		.3	.7								.7	7.0
SE	1.0	1.0	.3								2.4	4.6
SSE	.7	2.8	2.1	1.0	.3						6.9	7.6
S	.3	5.9	8.0	6.6	1.7						22.5	9.8
SSW	1.0	3.8	3.8	3.5	1.4	.3					13.8	9.8
SW		1.4	.3	1.7	.3						3.8	10.5
WSW	.7	.7	1.0	.7	.7						3.5	10.0
W	.3	1.0	2.1	2.4	1.7						7.6	11.1
WNW		.7	3.1	1.0							4.8	10.0
NW		1.4	1.7	1.7							4.8	9.0
NNW		1.4	1.4	2.8							5.5	10.5
VARIABLE												
CALM	////////////////////											////
TOTALS	5.5	23.7	30.4	27.1	8.3	.3					100.0	9.6

TOTAL NUMBER OF OBSERVATIONS: 289

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221150 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS(LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	2.0	1.7	3.7	.7						8.4	10.2
NNE		1.0	1.7	1.7	.7						5.1	11.1
NE		.7	2.0	2.0							4.4	11.1
NNE		1.0	3.0	.7							4.7	8.6
E		1.0	1.4		.3						2.7	8.6
ESE		.3	1.0								1.4	7.5
SE	.3	1.7	1.4								3.4	6.0
SSE		.3	1.4	.7	.3						2.4	10.7
S	.7	4.7	5.1	5.4	2.7						18.2	10.1
SSW	.7	1.4	3.0	3.0	.7	.3					9.1	10.6
SW	.7	.7	1.0	2.7	.7	.3					5.7	11.9
WSW	.3	1.0	2.7	.7							4.7	8.1
W	.7	1.4	4.1	2.0	2.0						10.1	10.9
WNW		1.0	3.0	3.4	.3						7.8	11.3
NW		1.7	2.4	1.4							5.4	9.6
NNW	.7	1.0	2.4	2.0							5.7	9.4
VARIABLE												
CALM	////////////////////////////////////										.7	////
TOTALS	3.7	20.2	37.2	29.1	8.4	.7					100.0	10.0

TOTAL NUMBER OF OBSERVATIONS: 296

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS(EST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	2.1	2.4	1.7	.3						7.3	8.9
NNE		2.4	1.4	2.1	1.7						7.6	11.2
NE	.7	.7	2.1	.7	.3						4.2	6.6
NNE	.7	1.0	2.4	1.0							5.2	8.1
E		1.0	2.4	.3							3.8	8.4
ESE		.7	1.4								1.7	8.8
SE	.3	.3	2.4								3.1	7.3
ESE	.7	.7	1.7	1.0							3.8	8.9
S	.7	3.8	5.5	4.8	1.4	.3					16.6	10.0
SSW		1.0	3.1	2.1	1.4						7.6	11.2
SW		1.0	2.1	1.4	.3	.3					5.2	10.9
WSW		1.0	1.4	.7	.3						3.5	9.9
W	.7	1.4	1.7	2.8	.3						6.6	10.6
WNW	.7	1.4	2.1	7.8	.3						8.7	10.7
W	.3	2.4	3.1	2.1	.7						8.7	9.5
WNW	.7	2.1	2.1	1.7	.3						6.9	8.3
VARIABLE												
OSLM	////////////////////										.3	////
TOTALS	4.8	22.8	37.4	20.3	7.6	.7					100.0	9.7

TOTAL NUMBER OF OBSERVATIONS: 259

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS(IST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	2.4	1.7	1.3	1.0						7.1	9.2
NNE	.7	1.7	1.7	2.0	1.3						7.4	10.1
NE		1.0	1.3	.7	.7						3.7	10.7
NNE		1.0	1.0	.3							4.4	6.2
E		1.7	.7								2.4	6.6
ESE		1.7	1.3								2.4	7.1
SE	.2	.7	.3	.3							1.3	7.0
ESE	1.3	1.0	2.4	1.3	.3						6.4	8.2
S	1.0	6.1	6.1	6.1	.7						19.9	8.9
SSW	1.7	2.7	4.7	2.0	1.0						12.1	8.5
SW	.3	2.4	1.3	2.0							6.1	8.0
WSW	.3		1.0		.3						1.7	9.8
W	.7	2.0	.7	1.0							3.0	8.4
WNW		1.7	1.3	2.0	.7						6.7	11.3
NW	.7	1.7	1.7	2.0							5.1	9.7
WNW	.7	2.7	4.0	1.3	.3						8.8	8.7
VARIABLE												
CALM	////////////////////////////////////										1.7	////
TOTALS	7.4	29.4	31.3	23.6	6.4						100.0	8.7

TOTAL NUMBER OF OBSERVATIONS: 297

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221100 STATION NAME: MUMMANER USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS(1ST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	0.6	0.3	2.4	.5						9.5	9.1
NNE	.6	1.6	1.1	1.5	.8						5.4	9.8
NE	.2	1.4	1.2	.9	.4						4.1	9.4
NNE	.2	1.4	1.2	.9	.0						3.3	7.4
E	.2	.9	.8	.1	.0						2.1	6.7
ESE	.1	.3	.6								1.0	7.0
SE	.2	.6	.6	.0							1.6	6.2
ESE	.4	1.1	1.3	.7	.2						3.7	8.4
S	1.3	7.1	7.9	6.0	1.1	.1					23.4	9.0
SSW	1.1	4.7	5.3	3.1	.9	.2					15.2	8.8
SW	.6	1.2	1.2	1.5	.2	.1					4.6	9.3
WSW	.3	.6	.8	.5	.2	.0					2.3	9.1
W	.4	.5	1.4	1.8	.8						5.3	10.8
WNW	.1	.5	1.8	0.5	.3						5.6	10.9
NW	.7	1.0	2.4	1.5	.2						5.6	9.3
WNW	.4	1.7	2.0	1.6	.3						6.1	9.0
VARIABLE												
CALM	////////////////////////////////////										7.2	////
TOTALS	7.1	24.7	31.9	24.6	5.8	.4					100.0	8.9

TOTAL NUMBER OF OBSERVATIONS: 2742

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 7P-87
MONTH: MAY HOURS(LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	5.7	4.3	3.3	1.0						14.6	8.8
NNE	1.7	3.7	2.0								7.0	5.1
NL	.3	1.3	2.0	.7							4.3	7.8
NNE	.7	1.3	1.3	.3							4.6	5.7
E		2.6	1.0								3.6	6.5
ESE	.7	1.7		.3							2.6	4.8
SE		1.0	.3	.3							1.7	7.6
SSE	.7	1.3	1.7	.3							3.6	6.9
S	1.3	6.3	8.3	4.0							19.9	7.8
SSW	1.0	5.6	3.3	1.0							11.9	6.7
SW	.3	.7	1.0		.3						2.3	7.9
WSW	.3	.7	1.0	.3							2.3	7.4
W	.3	1.3	.3	1.0	.3						3.3	8.7
WNW		.7	.3	1.7							2.3	12.3
NW		1.7	2.0	1.7							5.3	8.9
NNW	.3	4.7	2.3	.7	.3						7.9	7.0
VARIABLE												
CALM	////////////////////										2.6	////
TOTALS	7.9	45.7	31.1	15.6	2.0						100.0	7.3

TOTAL NUMBER OF OBSERVATIONS: 702

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAY HOURS(IST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	2.3	7.8	2.0	4.2								16.3	7.1
NNE	1.0	1.6	1.3	1.0								4.9	6.9
NE	1.0	2.7	1.3	.3								4.9	5.9
ENE	.3	2.7	1.3	.3								4.2	6.5
E	2.0	1.6										3.6	3.1
ESE	.3	.7	.3	.3								1.6	6.8
SE	.3	.7										1.0	4.0
SSE	.3	1.3	1.3	.3								3.3	7.0
S	2.7	5.2	6.2	4.6								22.9	7.5
SSW	1.6	3.9	6.5	2.3								14.4	7.5
SW		1.6	1.0	.7								3.3	7.4
WSW	.3	.7		.7								1.3	7.5
W			1.7	1.0	.3							2.6	12.4
WNW	.3	.7	1.6	1.3	.3							3.9	10.8
WW	.7	1.7	1.6	1.6								5.2	8.1
NNW		1.7	1.3		.3							4.9	7.1
VARIABLE													
CALM	////////////////////////////////////											1.6	////
TOTALS	12.9	37.7	29.1	19.6	1.0							100.0	7.2

TOTAL NUMBER OF OBSERVATIONS: 706

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 7P-87
MONTH: MAY HOURS(LST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	6.6	4.3	3.9		.3					15.8	8.5
NNE	1.0	1.3	1.3	1.0							4.6	7.3
NE	.3	2.0	3.0	.3							5.6	7.5
ENE	.7	.7	.3	.7							2.7	8.3
E	.7	2.7	.3	.7							3.6	5.5
ESE		1.0	.3	.3							1.6	8.0
SE		1.7									1.3	4.0
SSE		.7	.7	.7	.7						2.6	11.0
S	1.0	5.7	12.2	4.6							23.7	8.5
SSW	2.0	5.6	4.6	3.6							15.8	7.5
SW	.3	.3									.7	4.0
WSW	.7	.7	.3	.7	.3						2.6	7.9
W	.3	1.0	1.0	1.0	.3						3.6	9.0
WNW		.7	2.3	1.3	.3						4.3	10.8
NW		1.7	1.0	1.3							3.6	8.9
NNW	.7	1.7	1.3	.3	.3						3.9	7.9
VARIABLE												
CALM	////////////////////////////////////										4.6	////
TOTALS	8.6	21.6	22.9	21.1	2.0	.3					100.0	7.8

TOTAL NUMBER OF OBSERVATIONS: 304

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 22113 STATION NAME: MURMANSK USSR

FE-100 OF RECORD: 78-87
MONTH: MAY HOURS(LST): 0700-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.7	4.6	3.3	2.0	.7	.3						13.5	8.2
NNE		1.7	2.3	.7								4.3	8.6
NE	.3	.7	2.3	1.0								4.3	8.9
ENE	.7	1.3	1.0	.7								3.7	7.5
E		1.0	3.0	.7								4.6	8.9
ESE				.3								.3	14.0
SE		.7	.7	.3								1.3	9.5
SSE	.7	3.9	2.0	1.0								7.2	7.6
S	1.0	5.6	6.6	4.6	.3							19.1	8.7
SSW	2.0	2.6	5.3	3.3	.7							13.8	8.6
SW	1.4		2.0	2.0								5.6	8.9
WSW		.3	.7	1.0	.3							2.3	11.6
W	1.0	.7	1.3	2.0		.3						4.9	10.6
WNW	.3	1.6	1.0	2.0								4.9	9.1
NW		1.0	1.0	.7								2.6	9.0
NNW	.7	2.3	2.3	1.0	.3							6.6	7.9
VARIABLE													
CALM	////////////////////											2.0	////
TOTALS	8.6	28.6	34.5	23.0	2.3	.7						100.0	8.5

TOTAL NUMBER OF OBSERVATIONS: 704

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR FATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201120 STATION NAME: MURMANSK USS?

PERIOD OF RECORD: 78-87
MONTH: MAY HOURS(IST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	4.3	3.6	1.6	.7	.3					11.1	8.6
NNE	.3	2.0	3.0	1.6	.7						7.5	9.5
NE		1.7	2.6	1.6							5.2	9.5
ENE		.7	1.3	.7							2.3	9.4
E		1.6	2.3	.3							4.3	7.8
ESE		1.3	.3								1.6	6.4
SE	.2	.2	1.0	.3							2.0	7.7
SSE	.7	1.0	1.0	.7							3.0	7.6
S	.7	2.3	5.2	6.2	1.0						15.4	10.6
SSW	.3	1.6	2.0	4.6							8.5	10.2
SW	1.0	2.0	2.6	1.3	1.0						7.9	9.0
WSW	.3	2.7	2.6	1.6							6.9	8.3
W	1.7	1.3	1.0	2.3	.3	.7					6.9	9.8
WNW	.7	.7	1.7	1.6	.3						4.3	10.4
NW	.7	2.0	.7	2.7	.3						5.2	9.7
NNW	1.0	1.6	3.3	2.0							7.9	8.2
VARIABLE												
CALM	////////////////////											////
TOTALS	6.7	24.6	33.8	29.6	4.3	1.0					100.0	9.3

TOTAL NUMBER OF OBSERVATIONS: 705

GLOBAL CLIMATOLOGY BRANCH
USAF/CLTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAY HOURS(LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.7	2.6	4.3	3.3			.3					11.2	9.7
NNE	.3	1.7	3.3	2.7		.3						7.6	9.7
NE		.7	2.3		.3							3.3	8.7
NNE		.7	1.2	.7								3.0	8.7
E	.7	1.7	2.6	1.7								6.3	8.5
ESE		1.0	1.0									2.0	7.0
SE		1.7	.7									2.3	6.6
SSE		.7	2.3	.7	.3							3.3	9.9
S	.7	1.7	3.0	4.0	1.0							10.9	10.5
SSW	.3	2.2	3.3	2.6	.7							9.2	9.6
SW	.3	2.0	5.0	1.3	.7							9.2	9.0
WSW	.3	2.3	2.3	1.7	.7							6.6	8.5
W		1.7	1.0	1.3	1.0	.7						5.0	13.7
WNW		1.7	2.0	1.0	.7							4.6	10.0
NW		1.7	1.7	2.3	.3							5.6	10.5
NNW	.7	2.6	3.0	2.3	.3							8.9	8.7
VARIABLE													
CALM	////////////////////											1.0	////
TOTALS	3.6	24.6	38.9	24.4	5.9	1.0	.3					100.0	9.5

TOTAL NUMBER OF OBSERVATIONS: 303

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAY HOURS (LST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.7	4.7	6.3	7.7	.7						16.3	8.6
NNE		.7	2.3	2.0	.3	.3					5.3	11.9
NF		.7	2.3	1.0							4.7	9.5
ENE		1.7	4.3	1.3							7.3	8.9
E		1.7	3.3	1.0							5.6	8.8
ESE		.7	1.0	.3							2.3	8.3
SE	.3	1.3		1.3							3.7	8.2
SSE		.7	.7	.7							2.0	9.0
S	.7	1.7	5.3	3.7	.7						12.7	9.9
SSW		1.3	3.0	2.7							7.3	8.9
SW	.7	1.7	.7	1.7	.3						6.0	7.7
WSW		1.3	1.3	.7	.7						4.0	10.0
W	.3	2.0	1.0	2.0	.3						5.6	9.4
WNW	.3	1.7	1.0	1.3	1.0						5.3	10.1
WW		1.3	.3	2.0	.3						4.7	9.8
NNW	.7	3.0	2.7	2.3	.3	.3					9.3	9.3
VARIABLE												
CALM	////////////////////											.3
TOTALS	4.0	27.9	35.5	26.9	4.7	.7					100.0	9.2

TOTAL NUMBER OF OBSERVATIONS: 701

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAY HOURS(LST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56	
N	1.0	4.9	5.6	3.6	1.3		.3				16.6	9.5
NNE	.3	2.0	2.6	1.3							6.2	8.3
NE	.3	1.6	2.6	.7							5.3	7.8
NNE	.3	1.0	2.0	.7							3.9	7.8
E		1.3	2.0	.7							5.9	7.4
ESE	.3	1.0	1.3								2.6	6.5
SE		1.6	2.3	.3							4.3	8.0
SSE		2.0	1.6	1.6							5.3	8.8
S	.3	4.3	4.9	3.3	.3						13.2	8.8
SSW	.7	3.3	4.3	1.0							9.2	7.2
SW	.3	.7	.7	.7	.3						2.6	8.9
WSW	.3	1.0	.3		.7						2.3	9.4
W	.3	.3	1.3	.7	.3						3.0	5.7
WNW	.7	1.0	2.0	1.3							4.9	8.9
W	.2	2.3	2.0	.3							4.9	7.1
WNW	1.0	2.6	3.6	1.3		.3					8.9	7.9
VARIABLE												
CALM	////////////////////											.7
TOTALS	6.2	32.9	39.1	17.4	3.0	.3	.3				100.0	8.3

TOTAL NUMBER OF OBSERVATIONS: 104

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAL

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 7P-87
MONTH: MAY HOURS(LST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.9	5.4	4.2	3.2	.5	.1	.1				14.5	8.6
NNE	.6	1.7	2.3	1.2	.1	.1					5.9	8.4
NE	.3	1.3	2.3	.7	.0						4.6	8.1
ENE	.3	1.7	1.6	.7							3.9	7.8
E	.4	1.5	1.8	.6							4.7	7.4
ESE	.2	.9	.5	.2							1.8	6.9
SE	.1	1.0	.6	.3							2.1	7.3
SSE	.2	1.4	1.4	.7	.1						3.8	8.3
S	1.0	4.4	6.7	4.4	.4						17.0	8.8
SSW	1.0	3.0	4.0	2.6	.2						11.3	8.1
SW	.6	1.2	1.6	.9	.3						4.7	8.5
WSW	.3	1.1	1.1	.7	.3						3.5	8.8
W	.5	.5	1.0	1.4	.4	.2					4.4	10.4
WNW	.2	.9	1.4	1.4	.3						4.3	10.1
NW	.2	1.6	1.3	1.5	.1						4.7	9.0
NNW	.6	2.6	2.5	1.2	.2	.1					7.3	8.1
VARIABLE												
CALM	////////////////////										1.6	////
TOTALS	7.7	31.7	34.4	21.8	3.1	.5	.1				109.0	8.4

TOTAL NUMBER OF OBSERVATIONS: 2429

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271130 STATION NAME: MUKHANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUN HOURS(LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-66	
N	.7	4.1	7.6	5.1	.7						22.0	8.6
NNE	1.1	3.7	2.4	.7	.3						9.1	7.0
NE	.7	2.0	2.7	.3							5.8	7.1
NNE		2.7	1.0	.3							3.4	6.8
E		.7	1.7								2.4	7.7
ESE	.7		1.0								1.7	6.0
SE	.3	.7	1.0								2.0	6.7
SSE	1.7	1.4	.7	.7							4.4	5.5
S	.7	5.8	4.7	3.7	.3						15.3	8.3
SSW	.7	2.7	.3								3.7	4.9
SW		.7									.7	4.0
WSW	.7	.7	.3	.2							2.0	6.0
W		.7	.3	.7							1.4	10.0
WWSW	.7	1.0	1.0								2.7	6.5
WNW	.7	2.4	2.7	1.4	.7						7.5	9.4
NNW	.7	5.1	4.7	3.1	.7						13.6	8.1
VARIABLE												
CALM	////////////////////										3.4	////
TOTALS	7.8	27.4	32.5	16.3	2.4						100.0	7.5

TOTAL NUMBER OF OBSERVATIONS: 245

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 7A-87
MONTH: JUN HOURS (LST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	3.4	7.9	4.5	3.4	1.0						20.2	7.4
NNE	.7	3.1	4.1	1.7							9.2	7.9
NE		0.1	1.0								3.1	6.4
ENE	.7	1.0	.7	.7							2.7	7.3
E	.3	.3	.3		.3						1.4	8.8
ESE		.7	.7								1.0	8.0
SE		.7									.3	4.0
SSE	.3	.7	.7								1.4	5.5
S	1.0	7.2	5.1	3.1							16.4	7.3
SSW	1.4	5.5	3.1	1.0							11.0	6.2
SW	.3	1.4		.3							2.1	5.3
WSW	.7	.7	.7	.7							2.4	6.9
W	.7	.7	1.4		.3						3.1	7.2
WNW		.7	1.0	.7							2.1	8.3
W	.7	.7	4.1	2.1	.3	.7					8.6	10.3
NNW		3.8	4.8	1.4	.3						10.3	7.9
VARIABLE												
CALM	////////////////////										4.9	////
TOTALS	9.0	30.4	31.8	14.7	2.4	.7					100.0	7.1

TOTAL NUMBER OF OBSERVATIONS: 292

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 75-87
MONTH: JUN HOURS(IST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.7	7.6	5.1	3.7	1.0						19.0	8.1
NNE	.7	2.4	4.4	2.0							9.5	8.6
NE		.7	1.7								2.4	7.4
ENE		2.4	.7	.3							3.4	6.6
E		.3									.3	6.0
ESE	.3	.3									.7	4.0
SE	.3	.7									.7	4.0
SSE	.3	1.0	.3	1.0							2.7	7.8
S	1.7	11.2	5.4	2.4							20.1	6.8
SSW	2.0	4.4	2.0	1.7							10.5	6.3
SW	.7	1.0	1.0	.3							3.1	6.4
WSW			.7	.7							.7	12.0
W	.7	.7	.3	1.4							2.7	9.5
WNW	.7	1.0	2.0	.3	.3						4.1	8.6
WW		.7	3.4	.3	1.0						5.4	10.3
NNW	.7	5.4	2.0	3.4		.3					12.2	8.4
VARIABLE												
CALM	////////////////////											2.4
TOTALS	9.5	40.1	28.9	17.3	2.4	.3					100.0	7.6

TOTAL NUMBER OF OBSERVATIONS: 294

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 7P-87
MONTH: JUN HOURS(EST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	2.1	1.2	6.1	5.8	.7						21.8	8.6
NNE	.3	1.4	3.1	2.7			.3				7.8	10.4
NE	2.2	.7	1.4								3.1	5.8
ENE		.7	1.0								1.7	7.6
E	.3	2.0	.7								3.1	5.6
ESE		.7									.3	6.0
SE		1.0	.3								1.4	6.0
SSE		1.7	.7	1.0	.3						3.8	9.0
S	.7	5.8	6.5	2.4	.7						19.1	8.1
SSW		2.4	1.7	2.4	.3						6.8	9.5
SW	.7	.7	1.4	.7							3.4	7.8
WSW	.7	1.0	.3								1.7	4.9
W		.7	1.7	1.7		.3					4.4	10.8
WNW	.7	1.0	.7	1.0	.3						3.4	9.1
W		1.7	1.7	.7	1.4						6.5	10.0
WNW	.7	2.4	3.4	2.7	.7						10.9	9.4
VARIABLE												
CALM	////////////////////////////////////										1.7	////
TOTAL	6.5	32.2	32.8	21.2	4.4	.3	.7				100.0	8.5

TOTAL NUMBER OF OBSERVATIONS: 793

GLOBAL CLIMATOLOGY BRANCH PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
 USAFETAC FROM HOURLY OBSERVATIONS
 AIR WEATHER SERVICE/MAC

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
 MONTH: JUN HOURS(EST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-7	8-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-63	64-70		
N	1.7	4.5	8.6	5.5	1.7							20.5	9.9
NNE		4.7	1.7	2.7								7.2	8.8
NLE		1.7	1.7	1.2								1.4	9.5
ENE			2.1	1.3								2.4	9.7
E	1.7	1.4	1.3	1.3								2.7	5.5
ESE	1.7	1.1	1.3									1.7	5.6
SE		1.7										1.3	4.0
SSE		1.7	1.0	1.0	1.0							3.4	13.1
S	1.7	2.7	6.5	7.6								13.7	8.9
SSE	1.7	1.0	3.1	2.1	1.0							7.9	10.3
SE	1.7	1.0	1.4	2.1	1.3							5.1	9.9
SSE	1.7	1.7	1.7	1.7								1.7	1.0
S	1.7	1.1	2.1	2.4								7.2	8.7
SSE	1.7	1.7	1.0	1.0	1.3							3.4	9.5
SE	1.7	1.4	1.4	1.4	1.0							6.5	9.8
SSE	1.7	1.4	5.6	1.4	1.0	1.7	1.7					14.7	9.7
VARIABLE													
CALM	////////////////////												////
TOTALS	5.9	24.7	26.3	21.0	6.5	1.7	1.7					100.0	9.4

TOTAL NUMBER OF OBSERVATIONS: 252

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 79-87
MONTH: JUN HOURS(UT): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS							TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33		
N	.7	.9	6.8	8.2	1.7	.3		23.2	10.4
NNE		.7	3.8	7.1				7.5	11.3
NE		.3	2.0	.3				2.7	9.5
ENE			1.4	.7				2.0	10.3
E		.7	2.0	1.4				3.8	10.4
ESE		.7	.3	.3				1.4	8.0
SE		.7	.3	.3				1.0	8.7
SSE		.7	.3	1.3	.3			3.8	9.0
S	.7	.4	4.1	2.7	.7			10.6	9.5
SSW		1.7	1.7	7.4	.3	.3		7.5	10.7
SW		.7	1.4	.3	.7			2.7	10.5
WSW	.7	.7	2.7	1.0	.3			5.1	9.7
W	.3	1.0	1.4	.3	.3			3.4	7.9
WNW		.7	1.0	1.4	.7			3.8	11.5
WV	1.4	2.4	1.7	1.0	1.7	.3		8.5	9.4
WNW	.7	2.7	4.4	7.1	1.4			12.3	10.2
VARIABLE									
CALM	////////////////////////////////////							.7	////
TOTALS	4.1	21.6	35.5	29.0	6.2	1.0		100.0	10.0

TOTAL NUMBER OF OBSERVATIONS: 293

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAL

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUN HOURS (LST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	5.1	8.6	11.1	2.0						27.6	10.6
NNE	.7	2.7	4.0	3.0	.3						9.8	9.8
NE	.7	1.7	1.7	1.7							4.7	9.3
ENE		.7	1.3	2.0							4.0	10.5
E		.3	1.0	2.0							3.4	10.8
ESE			.7								.7	9.0
SE		.3	.3	.3							1.0	10.7
SSE		.7	.7	1.7							2.7	11.3
S	.7	2.7	4.0	3.7	.7						11.4	9.6
SSW		1.7	2.4	2.0	.3						6.4	9.3
SW		.7	.7	2.4	.3						4.0	10.9
WSW	.7	.7		.3	.3						1.7	8.2
W	.7	.3	2.4	1.0							4.0	9.5
WNW		.7	.7	.3							1.7	7.6
Ww		1.0	.7	2.4	1.3						5.4	12.6
WNW		2.4	2.4	5.4	1.0						11.1	11.5
VARIABLE												
CALM	////////////////////	////////////////////	////////////////////	////////////////////	////////////////////	////////////////////	////////////////////	////////////////////	////////////////////	////////////////////	.3	////
TOTALS	2.4	17.9	31.6	39.4	6.4						109.0	10.3

TOTAL NUMBER OF OBSERVATIONS: 277

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATION

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 7A-87
MONTH: JUN HOURS(EST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-7	8-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.7	4.1	9.1	11.1	1.0						26.0	10.3
NNE	.7	3.0	3.4	3.7							10.5	9.4
NF	.3	1.4	2.7	.7							5.1	8.1
ENE		.7	1.4	1.0							3.0	9.1
E	.3	1.4	1.7	1.0							4.4	9.5
ESE	.3	.7	.3								1.4	6.0
SE	.3	1.4	1.7	.7							4.1	7.5
SSE		1.4	3.0	.3							4.7	8.3
S	1.0	3.4	3.7	3.4	.3						11.8	8.5
SSW	.3	2.0	1.4	.3							4.1	6.5
SW	.7	.7	.3		.3						2.0	6.8
WSW	.7			1.0							1.7	8.4
W		.7	1.4	.3							2.0	9.0
WNW	.3	.7	1.0	.7							2.7	8.3
NW		1.4	1.0	2.7	.3						5.4	10.9
NNW		1.7	3.4	4.4	.7						10.1	10.8
VARIABLE												
CALM	////////////////////////////////////										1.0	////
TOTALS	5.4	24.0	35.5	31.4	2.7						100.0	9.1

TOTAL NUMBER OF OBSERVATIONS: 276

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 74-87
MONTH: JUN HOUR (LST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-7	8-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.2	5.2	7.1	6.8	1.2	.0					22.6	9.3
NNE	.4	2.7	3.4	2.6	.1	.0					8.7	9.1
NE	.7	1.1	1.7	.4							3.5	7.8
ENE	.7	.9	1.2	.7							2.6	8.5
E	.2	.9	1.0	.6	.0						2.7	8.3
ESE	.2	.4	.4	.0							1.1	6.5
SE	.1	.6	.5	.2							1.4	7.1
SSE	.1	1.1	.9	.9	.2						3.4	8.7
S	.9	5.1	5.3	3.1	.3						14.7	8.2
SSW	.6	2.7	2.0	1.6	.3	.0					7.2	8.0
SW	.7	.5	.8	.8	.2						2.9	8.5
WSW	.5	.4	.6	.6	.1						2.1	8.0
W	.1	.8	1.4	1.0	.1	.7					3.5	9.0
WNW	.2	.7	1.1	.6	.2						3.0	8.9
NW	.1	1.7	2.1	1.5	1.0	.1					6.7	10.2
NNW	.4	2.6	3.9	3.2	.7	.1	.0				11.9	9.5
VARIABLE												
CALM	////////////////////										1.8	////
TOTALS	6.2	29.5	33.1	24.4	4.4	.7	.1				100.0	8.7

TOTAL NUMBER OF OBSERVATIONS: 2302

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221157 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL HOURS(LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.6	9.8	7.8	4.6	.7						24.2	8.0
NNE	1.0	4.9	5.6	1.3							12.7	7.1
NE		4.2	1.6	.7							6.5	7.3
ENE	.7	1.6	.7								2.9	4.7
E		1.0		.3							1.3	6.5
ESE		1.6	.3								2.0	5.3
SE			.7	.3							1.0	9.3
SSE	.3	1.0	1.6	.3		.3					3.6	9.2
S	2.0	6.2	6.2		.3						14.7	6.5
SSW	1.0	5.2	1.3	.3							7.8	5.2
SW	.3			.7							1.0	10.7
WSW		.7	1.0								1.3	8.5
W	.3	1.3		.7							2.3	6.0
WNW		.7	.3								1.0	6.7
NW	1.7	1.3	1.6	1.0	.3						5.2	8.2
NNW	1.6	4.9	3.3	1.0							10.8	6.8
VARIABLE												
CALM	////////////////////										1.6	////
TOTALS	9.8	43.6	32.0	11.1	1.3	.3					100.0	7.0

TOTAL NUMBER OF OBSERVATIONS: 306

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201120 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL HOURS (LST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.6	9.7	5.5	2.3	.3						19.5	7.2
NNE	.0	3.9	3.9	1.6							10.1	7.4
NE	1.0	2.9	1.9	.6							6.5	6.3
NNE		2.3	.6	.3							3.2	6.8
E			.3								.3	10.0
ESE	.2	.6									1.0	4.0
SE			.3								.3	10.0
SSE	.3	1.0	1.0	.3	.3						2.9	8.3
S	2.3	6.5	4.9	2.3							15.9	6.7
SSW	2.6	6.9	4.5	.3							14.3	5.8
SW		.6	.3	.3							1.3	8.0
WSW	1.0			.3							1.3	4.5
W	.6	1.3	.6	.3							2.9	5.6
WNW	.6	.6	.3	.3							1.9	6.3
NW		1.0	2.3	.6							3.9	8.8
NNW	1.0	3.9	4.9	2.3							12.0	7.7
VARIABLE												
CALM	////////////////////										2.6	////
TOTALS	12.0	41.2	31.5	17.0	.6						100.0	6.7

TOTAL NUMBER OF OBSERVATIONS: 308

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL HOURS (LST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	2.9	7.8	10.1	7.6	1.0						25.5	7.8
NNE	.3	2.9	2.6	2.6							8.5	8.8
NE	.3	3.6	1.3	.7							5.9	6.2
NNE		1.3	.3								1.6	6.4
E		1.0	1.3								2.3	6.9
ESE	.7	.3									.7	3.0
SE	.7	1.7									1.6	3.6
ESE		1.0	.3								1.3	5.5
S	2.0	8.9	10.1	1.0	.3						22.2	7.1
ESW	1.3	4.2	3.3	.7							9.5	6.1
SW	1.7	.7	.3								2.0	3.3
WSW			.3								.3	8.0
W	.3	1.3	1.0	.3							2.9	6.7
WNW	.7		.7	1.3							2.3	10.3
NW	.7	.7	2.0	.7							3.3	8.4
NNW		2.3	4.2	1.0							7.5	7.9
VARIABLE												
CALM	////////////////////////////////////										2.6	////
TOTALS	9.5	36.6	37.0	11.5	1.3						100.0	7.1

TOTAL NUMBER OF OBSERVATIONS: 306

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 7A-87
MONTH: JUL HOURS(LST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.7	3.1	8.8	4.2	.6							23.7	8.3
NNE		1.9	5.5	1.9								9.4	9.0
NEL		1.3	1.9	.3								3.6	8.0
ENE		1.7	1.3									2.3	7.7
E	.3	1.7	.3									1.6	4.4
ESE	.3											.3	2.0
SE	.3	1.3	.6									2.3	6.3
SSE		1.9	1.6	.7								3.9	7.2
S	1.0	4.4	7.1	7.2	.3							20.1	7.6
SSW		2.9	1.9	2.9								7.5	9.7
SW	.3	1.6	.6	.3								2.9	5.6
WSW	1.0	1.0	.3	.3								2.6	5.8
W	.6	.7	.3	.3								1.6	6.0
WNW		.6		1.0	.3							1.9	13.2
WW	.9	2.3	3.2	.3								6.5	6.9
NNW	1.7	2.6	3.2	2.3								9.1	7.8
VARIABLE													
CALM	////////////////////											.6	////
TOTALS	7.5	25.7	37.0	17.5	1.3							100.0	7.8

TOTAL NUMBER OF OBSERVATIONS: 300

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL HOURS (LST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.7	5.5	11.8	5.2	.3							24.8	8.8
NNE	.7	.7	3.3	2.6	.3							7.5	9.7
NE	.7	.7	2.3	1.3								4.6	9.0
ENE		.3	1.3									1.6	8.0
E		1.7	.7									1.6	6.4
ESE		.3		.7	.3							1.0	11.7
SE		.3	.7	.7								1.3	10.5
SSE		1.7	2.0	.7								3.6	7.6
S	1.7	4.7	6.2	4.2	1.0	.3						17.3	9.3
SSW		1.0	2.3	2.3	1.0							7.5	10.4
SW		1.7	2.0	1.0								3.9	8.8
WSW	.3	.7	.3	1.0								2.3	8.3
W	.7		1.6									2.0	7.5
WNW	1.0	1.0	.3	1.0	.3	.3						3.9	9.2
NW	.7	2.0	1.0	.7								3.9	7.5
NNW	.7	5.2	4.6	2.3	.3							12.7	8.2
VARIABLE													
CALM	////////////////////											.3	////
TOTALS	5.7	27.1	39.9	24.5	3.6	.7						100.0	8.8

TOTAL NUMBER OF OBSERVATIONS: 306

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL HOURS(LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-7	8-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56			
N		4.7	12.7	8.5	1.0							26.8	9.9
NNE	.3	1.6	3.6	7.3								8.8	9.1
NE		.3	2.3									2.6	8.0
ENE		1.0	2.0	.3								3.3	7.8
E		.7	.7	.3								1.6	8.8
ESE		1.0	.3									1.3	6.5
SE		1.3			.3							1.6	7.4
ESSE	.3	1.3	1.0	.7								3.3	7.0
S		4.6	4.2	4.2	1.0							14.1	9.7
SSW		1.3	2.3	1.0	1.0							5.6	10.5
SW		1.0	2.0	2.6	.3							6.9	10.0
WSW		.7	1.0	.7								2.3	8.9
W		2.0	.7	1.3	.7							4.2	7.3
WNW		.7	.3		.3							1.3	9.3
NW	.7	1.0	1.0	1.6	.3	.3						4.9	10.4
NNW	.7	5.0	2.9	2.3	.3							11.4	8.0
VARIABLE													
CALM	////////////////////////////////////												////
TOTALS	2.0	29.1	37.3	26.5	4.9	.3						100.0	9.3

TOTAL NUMBER OF OBSERVATIONS: 306

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL HOURS(EST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.3	5.9	11.1	7.9	.7						26.9	9.3
NNE		1.3	5.9	4.9	.7						12.8	10.6
NE	.7	1.0	3.3	1.0							5.6	8.7
ENE		.7	1.6	.3	.3						3.0	9.4
E		.7	1.0	.3							2.7	6.3
ESE	.7	.7	1.6	.3							2.6	8.0
SE			.3		.3						.7	14.5
SSE	.7	2.0	1.3	.3	.3						4.3	7.8
S		4.6	5.9	3.3							13.8	9.1
SSW		2.0	1.3	1.0	.3						4.6	8.5
SW		1.0	1.0	.7	.7						3.3	10.2
WSW	.7	1.6	.7	.7							3.3	7.2
W		1.3	.7	.3							2.3	7.1
WNW	1.0	.3	.2		.3						2.0	6.2
NW	.7	2.0	1.0	1.3	.3						5.2	8.7
NNW	.3	2.6	2.3	2.3							7.5	8.5
VARIABLE												
CALM	////////////////////////////////////										.3	////
TOTALS	4.0	27.2	39.3	24.6	3.9						100.0	9.0

TOTAL NUMBER OF OBSERVATIONS: 705

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 74-87
MONTH: JUL HOURS (LST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-14	15-21	22-27	28-33	34-40	41-47	48-55	56-66		
N	1.2	10.7	9.2	7.9	.7							29.9	8.5
NNE		.7	4.6	3.0								9.2	10.1
NE	.3	2.3	3.6	1.0								7.2	8.3
ENE	1.7	1.0	1.3									3.0	5.8
E		1.0	.7	1.6								3.3	9.6
ESE	.3	1.7	.3									2.0	4.7
SE	1.0	1.6	.7									3.3	5.0
SSE	.3	.7	2.0	1.6								4.6	9.9
S		6.6	4.3	2.3								13.2	7.8
SSW	.3	2.3		.7								3.3	7.0
SW	.3	1.0	.7									2.0	5.3
WSW		.7	.3									1.0	5.3
W		.7	.3	.7								1.6	8.8
WNW	.3	.3										.7	3.0
NW	.3	1.7	1.0	1.6								4.3	9.7
NNW		3.3	4.9	2.6	.3							11.2	9.0
VARIABLE													
CALM	////////////////////											1.3	////
TOTALS	5.3	35.5	33.9	27.0	1.0							100.0	8.2

TOTAL NUMBER OF OBSERVATIONS: 704

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 79-87
MONTH: JUL HOURS(IST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.5	7.9	9.6	5.5	.7						25.2	8.5
NNE	.4	2.0	4.4	0.7	.1						9.8	8.9
NE	.3	2.0	2.3	.7							5.3	.6
NNE	.2	1.1	1.1	.1	.0						2.6	7.0
E	.1	.8	.6	.3							1.8	7.6
ESE	.2	.7	.3	.1	.0						1.3	6.2
SE	.2	.7	.4	.1	.1						1.5	7.0
ESE	.2	1.7	1.4	.4	.1	.0					3.4	8.1
S	1.1	6.2	6.1	2.6	.4	.0					16.4	7.9
SSW	.7	3.3	2.1	1.1	.3						7.5	7.5
SW	.3	.9	.9	.7	.1						2.9	8.2
WSW	.3	.6	.5	.4							1.8	7.1
W	.3	1.7	.7	.5	.0						2.5	7.2
WNW	.4	.5	.7	.4	.2	.0					1.9	8.7
WW	.5	1.4	1.6	1.0	.1	.0					4.7	8.5
NNW	.7	3.8	3.6	2.0	.1						10.3	8.0
VARIABLE												
CALM	////////////////////										1.2	////
TOTALS	7.1	34.6	36.1	16.6	2.2	.2					100.0	8.0

TOTAL NUMBER OF OBSERVATIONS: 2449

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201120 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL HOURS (LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.7	6.6	6.0	2.0								16.9	7.6
NNE	1.7	4.7	3.6	2.3								11.7	7.6
NE	.7	3.3	1.0	.3								5.3	6.0
NNE	.7	1.7	.7									2.3	5.1
E		1.7	.7									1.7	6.8
ESE		4.7										1.7	4.8
SE	.7	1.7	.7									2.0	5.7
SSE	.7	1.3	.3	1.0								3.0	6.0
S	1.7	7.9	7.3	1.3								14.5	6.7
SSE	1.7	7.7	4.6	.7								13.2	6.6
SSW		1.7	.7									2.3	5.2
SSW	.7	.3	.7									1.3	6.0
W		.7	1.7	.3								1.7	10.0
WSW		.7	1.7	1.3								1.0	9.8
SW		1.7	1.3	.7	.3							4.0	7.8
WSW	.7	1.7	1.7	1.7								7.0	6.6
UNKN													
TOTAL	1.7	31.9	37.3	11.3	.7							100.0	6.7

TOTAL NUMBER OF OBSERVATIONS: 702

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG HOURS(UT): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	7.7	7.7	3.0	7.3							15.8	7.1
NNE	4.7	4.3	3.9	1.6							10.5	7.5
NE		1.3	1.0	4.7							3.0	9.2
NNE	4.7	1.6	4.7								3.0	5.3
E	14.7	4.7	4.3								24.3	3.4
ESE		4.7									4.7	4.0
SE	4.7	4.3	4.3	4.3							14.3	6.5
SSE	4.3	14.3		4.7							24.3	7.1
S	14.6	11.2	6.6	14.0	4.3						20.7	6.5
SSW	4.7	6.6	5.6	4.7							13.8	6.7
SW	14.7	14.0	4.7								34.0	4.7
WSW		4.7	14.0	4.7							24.0	8.7
W		4.7	14.0	14.0							24.6	9.5
WNW		4.7	14.7	24.0							34.0	10.5
W		14.0	24.6	14.0							44.6	9.4
WNW		4.7	24.0	14.0							54.9	7.4
VARIABLE												
CALC	////////////////////										4.6	////
TOTALS	74.7	41.4	30.3	14.6	4.3						100.0	6.8

TOTAL NUMBER OF OBSERVATIONS: 334

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 7A-87
MONTH: AUG HOURS: 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.7	8.9	4.3	2.6							17.1	6.9
NNE	1.3	1.6	2.6	2.0							7.2	8.3
NE	.3	1.6	1.7	.7							3.9	7.5
NNE		1.3	1.0	.3							2.6	7.3
E	.7	1.0	.3								1.6	4.4
ESE	.3	.7									1.0	3.7
SE		.7	.7								1.0	7.3
SSE	.3	2.3	.7	1.0							3.9	7.3
S	2.0	9.2	7.9	1.0							20.1	6.5
SSW	1.0	6.2	6.9	1.3							15.5	7.1
SW	.7	1.0	1.3	.3							3.0	6.4
WSW	.7	.3	.3								1.3	5.0
W		.7	2.0	1.3	.3						3.9	10.9
WNW	.7	1.0	1.0	1.6							3.9	9.5
NW		1.6	1.3	.7	.3						3.9	8.4
NNW	.7	3.9	1.6		.3						6.6	6.2
VARIABLE												
CALM	////////////////////										3.3	////
TOTALS	1.6	41.8	32.6	10.8	1.0						100.0	6.9

TOTAL NUMBER OF OBSERVATIONS: 7.0

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG HOURS (LST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GF 56		
N	1.6	5.9	3.3	7.9								14.7	8.0
NNE		1.7	3.3	2.0	.3							6.9	10.1
NE		2.7	1.6	1.0								4.6	8.0
NNE	.7	2.7	.7	.3								3.6	6.2
E			.3									.3	8.0
ESE	.7		.3									1.0	4.0
SE		.7	.3									1.0	6.0
SSE	.3	1.0	.7									2.0	6.0
S	.7	11.1	9.5	2.0	.3							23.5	7.4
SSW	1.6	4.9	3.9	2.9								13.4	7.6
SW	.3	.7		2.0	.3							3.3	10.7
WSW	.3	.7		.7								1.3	7.5
W	.7	.7	.7	.3								2.0	6.3
WNW		2.0	2.0	2.9								6.9	9.8
NW		1.3	2.3	2.6								6.2	10.0
NNW	1.0	3.6	2.3	1.0								7.8	6.7
VARIABLE													
CALM	////////////////////											1.6	////
TOTALS	7.4	36.2	31.0	21.6	1.0							100.0	7.8

TOTAL NUMBER OF OBSERVATIONS: 306

GLOBAL CLIMATOLOGY BRANCH
USAF/CLTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG HOURS(IST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.0	4.6	4.6	5.9	.3							16.4	9.4
NNE		1.3	2.0	1.0	.7							4.9	9.9
NE		1.0	2.3	.3								3.6	8.2
ENE		1.3	1.3	.3								3.0	7.1
E		1.0	.3									1.3	5.5
ESE		1.0	.3									1.3	6.5
SE	.7		1.0									1.6	6.0
SSE		2.0	1.6	.3								3.9	7.2
S	1.6	5.2	8.5	4.9								20.3	8.4
SSW	.7	3.6	1.6	3.6								9.2	8.9
SW	1.0	1.7	1.6	2.0	.3							5.9	9.1
WSW	.7	.7	1.3									2.3	7.7
W	.3	2.0	.7	1.3	.7							4.9	9.5
WNW		1.7	1.0	.3	.3							3.0	8.6
W	.7	.7	1.3	2.3	.3							4.9	10.3
NNW	1.0	3.6	2.3	3.0	.7							10.5	8.9
VARIABLE													
CALM	////////////////////											3.0	////
TOTALS	6.6	30.2	31.6	29.2	3.3							100.0	8.5

TOTAL NUMBER OF OBSERVATIONS: 335

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG HOURS (LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.3	3.3	5.6	5.6	.7						15.4	9.8
NNE	.3	2.3	3.6	2.0	.3						8.5	9.0
NE		1.3	2.3	1.0							4.6	8.7
NNE	.7	.3	1.0	.7							2.6	7.3
E		1.0	1.3	.3							2.6	7.8
ESE		.3	1.0								1.3	8.3
SE	.3	.7	.7								1.6	6.4
SSE		1.3	2.6	.3							4.3	8.5
S	.7	4.9	4.6	4.6	.3						14.9	8.7
SSW	.3	2.0	3.6	2.3							8.2	9.3
SW	.3	1.6	2.6	1.6							6.2	9.2
WSW		1.3	1.3	1.1							3.9	9.3
W	.7	1.7	2.3		.3						4.6	7.5
WNW	.3	.7	.3	1.0	.3						2.6	10.1
W	.3	1.3	1.3	0.0	.3						5.2	10.3
WNW	1.7	4.7	2.6	3.6	1.0						12.8	8.6
VARIABLE												
CALM	////////////////////										.7	////
TOTALS	5.2	27.9	36.7	20.2	3.3						100.0	8.9

TOTAL NUMBER OF OBSERVATIONS: 105

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG HOURS(IST): 1900-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	4.6	7.6	5.6	1.3						19.8	9.6
NNE		3.7	4.0	4.0	.3						11.6	9.2
NE	.7	.7	2.6	1.3							5.3	8.8
NNE		.3	1.3	1.3							3.0	10.0
E	.7	.7	1.0	.3							2.3	7.1
ESE	.3	1.7	.3								2.3	5.4
SE		1.7	.7	.3							2.6	6.8
ESE	.7	1.7	1.7	.7							4.6	6.9
S	1.3	3.0	5.3	4.0	.3						14.5	8.6
SSW	.7	2.0	3.0	2.0	.3						7.9	8.9
SW	.7	2.0	1.3	2.6							6.6	9.8
WSW		.7		.7							1.3	9.7
W	.7	1.7	.7	1.0							4.0	7.3
WNW	.3		.3	.3							1.0	7.3
W	.7	1.3	2.6	2.3	.3						6.9	9.4
WNW	.7	1.0	1.3	2.3	.3						5.6	9.7
.....												
VARIABLE												
CALM	////////////////////////////////////											.7
TOTALS	7.6	20.7	33.7	28.4	3.0						103.0	8.7

TOTAL NUMBER OF OBSERVATIONS: 303

GLOBAL CLIMATOLOGY BRANCH
USAF/CTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 79-87
MONTH: AUG HOURS(LOCAL): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			56-60
N	1.5	2.9	5.9	2.6	1.0							14.7	8.7
NNE		4.4	2.6	2.3	.7							12.4	8.8
NF		2.3	2.9	.7								5.9	7.8
FNE	.7	2.3	2.0	1.0								5.9	6.9
F	.3	3.3	1.0	.3								4.9	6.3
FSE	.3	1.0	1.6									2.9	6.9
SE	.3	.3	.3	.7								1.6	8.4
SSE		.7	2.9	.3								3.9	8.3
S	1.6	8.8	5.5	2.9								18.9	7.2
SSW	.7	3.9	.3	.3								5.2	5.0
SW	.3	2.6	1.0	.3								4.2	5.7
WSW	.7	1.0										1.6	4.0
W			.7	.7								1.0	12.0
WNW	.3	1.0	.7	.3								2.3	6.6
NW		1.0	1.0	1.3								3.3	9.2
NNW	1.0	4.6	3.9	2.9	.7	.7						13.4	8.8
VARIABLE													
CALM	////////////////////////////////////											.7	////
TOTALS	7.8	46.4	31.5	10.6	2.3	.3						100.0	7.6

TOTAL NUMBER OF OBSERVATIONS: 707

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/PAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 20113 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG HOURS(IST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.7	5.5	5.0	4.1	.4						16.3	8.4
NNE	.4	2.9	3.2	2.1	.3						8.9	8.6
NF	.2	1.7	1.9	.7							4.5	7.9
NNE	.4	1.7	1.1	.5							3.2	6.9
E	.3	1.1	.7	.1							2.1	6.1
ESE	.2	.9	.5								1.5	5.7
SE	.2	.7	.5	.2							1.6	6.6
ESE	.2	1.4	1.3	.5							3.5	7.5
S	1.4	7.8	6.9	2.7	.2						18.9	7.4
SSW	.4	4.5	3.7	1.7	.3						12.8	7.5
SW	.5	4.6	1.1	1.1	.1						4.4	7.8
WSW	.3	.6	.6	.4							1.9	7.6
W	.2	.8	1.1	.7	.2						3.1	8.9
WNW	.2	.9	.9	1.2	.1						3.3	9.4
W	.2	1.3	1.7	1.5	.2						4.9	9.5
WNW	.4	2.5	2.2	1.6	.4	.2					8.1	8.0
VARIABLE												
CALM	////////////////////////////////////										2.3	////
TOTALS	7.6	76.4	32.3	17.5	1.8	.2					100.0	7.7

TOTAL NUMBER OF OBSERVATIONS: 2436

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS(IST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-7	8-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.4	0.2	2.1	1.7		.3					11.6	7.1
NNE	.3	2.1									2.4	4.3
NE	.3	1.7	.3								2.4	4.6
ENE	.3	.3		.3							1.0	6.7
E	.3	.7									1.0	3.3
ESE												
SE		1.0									1.0	4.7
SSE	.7	1.7	.3	.3	.3						2.7	6.6
S	2.4	9.2	9.9	6.8	.3	.7					29.5	8.6
SSW	1.0	8.2	4.5	1.4							15.1	6.6
SW		1.4	1.0	1.0							3.4	8.8
WSW	.7	.3	1.7	.3							3.1	7.3
W	.7	1.0	2.4	.3	.3						4.8	7.8
WNW		.3	1.4	1.7							3.4	10.4
Wd	.7	2.1	1.4	2.4	1.7						8.2	10.5
NNW		2.1	1.7	2.4	.3						6.5	9.7
VARIABLE												
CALM	////////////////////										3.8	////
TOTALS	5.4	37.7	26.7	15.8	3.1	1.0					100.0	7.7

TOTAL NUMBER OF OBSERVATIONS: 292

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221133 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS (LST): 0100-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-7	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56		
N	1.7	4.5	3.1	.7	.7							10.6	6.6
NNE	.7	1.0	.3	.3								3.4	5.4
NE	.7	.7										1.4	3.0
NNE	.3	.7	.7									1.7	6.0
E		.7										.7	1.0
ESE													
SE		.7	.3	.7								1.0	9.3
SSE	1.0	.3		.3								1.7	5.2
S	2.7	12.3	8.9	6.1	1.0							31.1	7.9
SSW	1.0	6.5	5.5	1.0	.3							14.3	6.6
SW		1.7	1.0	.7			.3					3.8	9.7
WSW	.7	.3	1.4	1.7								4.1	8.8
W	.3	.7	.7	2.0	.3							4.1	10.4
WNW		1.7	2.4	1.0	.3							4.5	10.1
W	1.4	.7	1.4	3.1								6.5	8.9
NNW	1.0	1.7	.7	7.1	.3	.3						7.2	10.2
VARIABLE													
CALM	//////////	//////////	//////////	//////////	//////////	//////////	//////////	//////////	//////////	//////////	//////////	3.8	//////
TOTALS	11.6	34.5	26.3	21.1	3.1	.3	.3					100.0	7.6

TOTAL NUMBER OF OBSERVATIONS: 293

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221150 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS (LST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.4	4.9	1.4	1.4	.4						9.5	6.9
NNE	.4	2.5		.4							3.2	5.1
NE	.7		.4								1.1	4.0
ENE	.4	1.4									1.8	4.4
E		.4									.4	6.0
ESE	.4										.4	2.0
SE	.4	.7	.7								1.8	6.4
SSE		1.1	.7	1.1							2.8	9.8
S	2.1	11.6	6.1	4.9	1.1						27.8	7.8
SSW	1.1	6.7	3.9	1.1							12.7	6.5
SW		1.1	2.1	1.1							4.2	9.0
WSW		1.1	1.4		.4						2.8	6.6
W		1.4	1.4	2.5	.4						5.6	10.3
WNW	2.1	.4	1.4	2.1	.4	.4					6.7	9.5
W	1.4	2.1	3.2	2.5							9.2	7.9
WNW	1.1	2.5	1.1	2.1	.7						7.4	8.7
VARIABLE												
CALM	////////////////////										2.8	////
TOTALS	11.7	37.7	25.7	19.0	3.2	.4					100.0	7.6

TOTAL NUMBER OF OBSERVATIONS: 264

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS (LST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N		2.9	1.7	1.0	.7							7.2	8.4
NNE		4.1	.7			.3						3.1	7.2
NE	.3	1.0	.3									1.7	4.8
ENE	.3	.3	.3									1.0	4.7
E		.3	.7									1.0	7.3
ESE													
SE	.3	.3	.7									1.4	5.5
SSE	.3	2.1	.7		.3							3.4	6.5
S	3.8	12.0	11.7	5.8	1.0							34.4	7.6
SSW	2.1	4.5	3.4	2.1	.3							12.4	7.3
SW			.7	2.1		.3						3.1	13.7
WSW		1.0	1.4	1.0								3.4	9.2
W	.3	1.4	3.4	1.0	.3							6.5	9.0
WNW		.7	1.4	.7								2.7	9.5
NW	.3	2.1	3.4	1.0								6.9	8.3
NNW	1.7	3.1	1.4	2.4	.3	.3						9.3	8.3
VARIABLE													
CALM	////////////////////											2.4	////
TOTALS	9.6	34.7	32.0	17.2	3.1	1.0						103.0	7.8

TOTAL NUMBER OF OBSERVATIONS: 291

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS (LST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.5	4.7	2.6	1.5	.7						10.9	7.3
NNE		1.8	1.8								3.6	7.2
NF		1.1									1.1	5.3
ENE		.7	.4								1.1	6.7
E			.7	.4							1.1	9.3
ESE			.4	.4							.7	10.0
SE		.4		.4							.7	9.0
SSE		1.5	1.8	.7							4.0	9.4
S	.7	6.4	6.9	8.4	1.8						26.1	9.7
SSW	1.5	3.6	3.6	2.2	1.5						12.4	9.9
SW	.4	1.5	2.9	.7		.4					5.8	8.7
WSW	.7	1.1	2.2	.7	.4						5.1	6.4
W		.4	2.9	1.5	1.1						5.8	12.1
WNW	.4	.4	1.8	2.2							5.5	11.1
NW	.7	.4	1.8	2.6		.4					5.8	10.8
NNW	1.1	4.7	1.8	1.1	.4	.4					8.9	8.2
VARIABLE												
CALM	////////////////////////////////////										1.1	////
TOTALS	6.5	29.9	31.8	23.4	5.8	1.1					100.0	9.0

TOTAL NUMBER OF OBSERVATIONS: 274

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS(1ST): 1500-1700

DIRECTION (010-090)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.3	3.4	3.1	2.4	.7						9.9	9.4
NNE			.7	1.0							1.7	10.8
N		.7	.3	.3							1.0	8.7
NNE		.7		.7							1.0	10.0
E	.7	.7	.7	.3							2.4	6.6
ESE		.7	.3								1.0	6.0
SE		.7	.3								.7	8.0
ESE		1.7	3.1	.7	.3						5.4	9.7
S	.7	7.5	7.5	6.1	2.4	.3					24.5	9.9
SSW	.7	3.7	2.0	3.1	1.4						10.9	9.4
SW		1.7	1.7	2.4	.7						6.5	10.0
WSW	.7	.7	3.4	1.7							6.1	9.3
W	1.4	2.0	2.4	1.7	.3						7.8	8.4
WNW	.7	1.4	1.4	1.7							4.8	9.4
NW		2.7	1.0	2.0	.7						6.5	7.8
NNW	1.4	1.7	1.7	1.7	1.0						8.5	9.9
VARIABLE												
CALM	////////////////////										1.4	////
TOTALS	5.8	20.9	29.6	26.5	7.5	.3					100.0	9.3

TOTAL NUMBER OF OBSERVATIONS: 2-4

GLOBAL CLIMATOLOGY BRANCH
LSAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS(LST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.4	2.4	4.0	2.9							9.7	9.1
NNE		.7	1.6	.4							2.9	8.8
NE		1.1	1.1	.4							2.5	7.7
ENE		.4	1.4	.4							2.2	9.0
E	.4	1.4	.7	.4							2.9	6.8
ESE		.4	.4								.7	6.0
SE		1.1	1.4								2.5	6.9
SSE	.7	1.1	2.5	2.5		.7					7.6	10.8
S	.4	4.7	7.9	6.1	1.4						20.2	9.9
SSW	1.4	4.7	2.2	3.2		.4					11.9	8.1
SW	1.1	1.4	2.5	1.8							6.9	7.8
WSW		1.4	1.4								2.9	7.3
W	.4	1.4	1.1	1.1	.4						4.3	9.3
WNW	.4	2.7	2.5	1.1							6.1	7.8
NW	.4	1.4	2.5	2.2	.4						6.9	9.7
NNW	1.1	1.4	1.8	2.5	1.4						8.7	9.7
VARIABLE												
CALM	////////////////////										1.1	////
TOTALS	6.5	27.4	35.4	24.9	3.6	1.1					100.0	8.9

TOTAL NUMBER OF OBSERVATIONS: 277

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS (LST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.4	5.4	2.0	1.4								10.1	6.5
NNE	.7	1.7	.3									2.4	4.9
NE		1.7		.3								2.0	6.0
NNE		1.7										1.0	5.3
E		1.7		.3	.3							2.4	7.9
ESE	.3	.7	.3									1.4	5.5
SE	.3	1.0	.7	.3								2.4	6.6
ESE	.7	.7	.7	1.0								3.0	8.0
S	2.0	9.7	11.8	6.4	1.0							30.7	8.6
SSW	1.0	6.4	2.4	2.7			.3					12.9	7.9
SW	1.0	2.4	1.4									4.7	5.7
WSW	.3		.3	.3								1.0	8.0
W	.3	.3	1.0	1.0		.3						4.1	11.9
WNW		.3	1.0	2.0								3.4	11.8
NW	.7	1.4	2.4	2.7	1.0							7.8	10.8
NNW	.7	4.4	1.7	1.4	1.4							9.5	8.4
VARIABLE													
CALM	////////////////////////////////////											1.4	////
TOTALS	8.8	26.5	26.0	20.9	3.7	.3	.3					100.0	8.1

TOTAL NUMBER OF OBSERVATIONS: 296

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS(1ST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.0	4.5	2.5	1.6	.4	.0					10.0	7.6
NNE	.2	1.6	.7	.3		.0					2.8	6.5
NE	.3	1.0	.3	.1							1.7	5.6
ENE	.2	.7	.3	.2							1.3	6.6
E	.0	.7	.7	.2	.0						1.5	6.8
ESE	.1	.2	.2	.0							.5	6.2
SE	.1	.7	.5	.1							1.4	6.8
SSE	.4	1.2	1.2	.6	.1	.1					3.9	8.5
S	1.7	9.4	9.1	6.3	1.3	.1					29.1	8.6
SSW	1.2	5.6	3.4	2.1	.4	.0	.0				12.8	7.6
SW	.3	1.4	1.7	1.2	.1	.1	.0				4.8	8.9
WSW	.3	.7	1.7	.7	.1						3.6	8.5
W	.4	1.1	1.9	1.5	.4	.0					5.4	9.8
WNW	.4	.8	1.7	1.7	.1	.0					4.7	9.8
NW	.7	1.6	2.1	2.3	.5	.0					7.2	9.6
NNW	1.0	2.7	1.5	2.2	.7	.1					8.2	9.1
VARIABLE												
CALM	////////////////////										2.2	////
TOTALS	4.7	33.7	29.1	21.3	4.1	.7	.1				100.0	8.2

TOTAL NUMBER OF OBSERVATIONS: 2301

GLOBAL CLIMATOLOGY BRANCH
USAF/TAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS (LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.7	3.7	1.0		.3							5.7	6.1
NNE	.7	1.3	.3	.3	.3							3.0	7.0
NE	.3	.7	.7	.3								2.0	7.0
ENE	.7	.7	1.3									2.7	6.3
E	.7	1.3	.3									2.0	5.0
ESE													
SE		.3	1.0									1.3	7.5
SSE		1.3	.7	1.7	.7							4.3	10.8
S	2.7	10.3	11.3	7.7	1.0							33.0	8.5
SSW	.7	6.0	6.7	4.3	1.7							19.3	9.4
SW		2.0	.3	.3	.3							3.0	7.7
WSW	.7	1.0	1.3		.7							3.3	9.2
W	.3	.3	.3	1.7	.7	.3						3.7	13.7
WNW		.3		7.7	.7							4.7	14.6
NW		2.7	1.3	.3	1.0		.3					5.7	10.5
NNW		1.0	1.0	1.0	.3							3.3	9.9
VARIABLE													
CALM	////////////////////											3.0	////
TOTALS	6.7	33.0	27.7	21.3	7.7	.3	.3					100.0	8.8

TOTAL NUMBER OF OBSERVATIONS: 300

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS(IST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	2.6	.7	1.0	.3						5.2	7.3
NNE		2.0	1.0	1.0							3.9	8.3
NE	.7	.7	1.0								2.3	5.7
NNE	1.3	1.3									2.6	3.3
E		.7	.7								1.0	6.7
ESE	.7	.3	.3								1.3	5.0
SE		.3	1.0								1.3	7.5
SSE	.7	2.0	1.0	1.0	.7						5.2	8.5
S	.7	10.1	13.4	9.5	.7						34.3	9.0
SSW	1.0	4.9	2.9	3.6	.7						13.1	8.6
SW	.7	1.3	.7	1.0	.3	.3					4.2	10.2
WSW	1.0	1.0	.7	.7		.7					3.6	9.6
W		.7	.7	1.3	1.3	.3					4.2	13.8
WNW		.7	1.0	2.9	.7	.3					5.2	14.1
NW	.3	.7	1.0	1.3	.7		.3				4.2	11.8
NNW	1.0	.7	1.3	1.3	.3						4.6	9.1
VARIABLE												
CALM											3.6	////
TOTALS	5.5	29.1	26.8	24.5	5.6	1.6	.3				100.0	8.8

TOTAL NUMBER OF OBSERVATIONS: 306

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM POORLY OBSERVATIONS

STATION NUMBER: 221150 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS(IST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N		1.7	.7	.7	1.0						3.7	10.6
NNE	.7	1.4	1.7	.7							6.4	6.6
NE		1.7		.3							1.7	5.6
ENE		2.0	.7	.7							3.4	7.4
E	.7		.3								.7	5.0
ESE		.7									.7	5.0
SE	.3		.3	.7							1.0	8.7
SSE	.3	1.7	.3	2.0							4.4	8.5
S	2.7	10.4	10.4	9.1	1.0	.3					33.9	8.9
SSW	1.0	1.1	4.4	2.3	.7						16.4	7.6
SW	.3	2.7	.7	1.7		.3					5.7	8.5
WSW		.7	.7	2.0	.3						3.4	12.1
W	.3	.7	.3	1.7	1.3	.3					4.7	13.9
WSW		.7	.7	2.3	.7	.3					4.7	12.9
W		1.0	1.0	.3	.3	.3					3.0	10.9
NNW		1.7	.7	2.0							4.4	9.4
VARIABLE												
CALM	////////////////////										2.7	////
TOTALS	6.0	20.9	22.8	26.2	5.4	1.7					100.0	8.8

TOTAL NUMBER OF OBSERVATIONS: 248

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MUHMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS(IST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	3.0		1.0	1.0						5.6	8.9
NNE	.7	1.7	1.0	.3							3.3	6.2
NE	.7	1.7	1.0	.7							4.0	6.7
NNE	.3	.3		.3							1.0	8.0
E	.7	.7									1.0	2.7
ESE		.3									.3	4.0
SE		1.7	.7								2.3	5.4
SSE	.7	.7	2.0	1.0							4.0	9.0
S	1.3	10.0	11.3	9.3	1.7						36.8	8.9
SSW	2.0	4.7	3.3	4.3	1.0						15.2	8.5
SW		1.7	1.7	1.7							4.6	9.4
WSW		.3	.3	.7	.7						2.0	13.3
W	.7	.7	.3	1.3	1.7	.3					4.6	14.0
WNW		.7		1.7		.3					2.6	12.9
NW		1.7	2.0	.7	.3	.7					4.6	11.9
NNW		0.7	1.3	.3	.7	.7					4.6	10.1
VARIABLE												
CALM	////////////////////										3.3	////
TOTALS	7.3	32.8	24.8	23.2	7.0	1.7					100.0	8.9

TOTAL NUMBER OF OBSERVATIONS: 302

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS (LST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	.7	1.4	.7	.7						3.8	9.8
NNE	.3	2.7	2.0			.3					5.5	7.6
NE		.3	.7	.3							1.4	9.5
ENE	.7	2.7		.3							3.1	5.8
E	.3	.3	.3	.7							1.7	8.8
ESE												
SE	.7	.7	.7	.3							1.7	6.8
SSE		1.0	1.4	2.7	.3						5.5	11.4
S	1.0	9.5	11.9	10.2	1.7						33.4	9.8
SSW	1.4	4.4	3.8	4.1	.7	.3					14.7	9.0
SW	.7	.7	.7	.7	.7						3.1	10.0
WSW	.3	.3	.3	1.4	.7	.3					3.4	13.5
W		1.7	1.4	3.1	1.4						6.8	12.9
WNW	.7		1.7	.3							2.7	8.0
NW		1.7	1.4	1.0	1.4						4.8	11.9
NNW	.7	2.7	.7	2.7	.3						7.2	9.1
VARIABLE												
CALM	////////////////////////////////////										1.4	////
TOTALS	6.5	26.7	29.3	24.7	7.8	1.7					100.0	9.7

TOTAL NUMBER OF OBSERVATIONS: 293

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS (LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55		
N	.3	2.3	1.3	1.0	.7							5.2	9.0
NNE	.7	1.3	1.3	.3		.3						3.9	8.4
NE		1.3	.3	.7								2.3	8.0
ENE	1.0	1.6	.3	.3								3.3	6.2
E		.7	1.0		.3							2.0	8.5
ESE	.3	1.3	1.0									2.6	5.8
SE													
SSE		1.0	1.6	2.6	1.0							6.2	11.5
S	1.0	7.2	9.5	10.1	3.3							31.2	13.3
SSW	1.0	2.0	5.6	3.9	.3	.7						13.4	10.3
SW	.7	.3	1.3	.7	.3	.3						3.7	11.2
WSW		1.0	.3		1.3							2.6	12.8
W		1.0	1.3	2.0	.7							5.6	9.8
WNW	.3		2.3	2.3	1.0							6.9	11.9
NW	.7	.3	1.6	1.3								3.9	9.0
NNW	.7	2.3	1.0	1.3	.7							5.9	8.7
VARIABLE													
CALM	////////////////////											2.0	////
TOTALS	5.2	23.9	29.7	27.5	9.5	1.3						100.0	9.7

TOTAL NUMBER OF OBSERVATIONS: 306

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221133 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS(LST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL	MEAN
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	WIND
N		.7	1.4	1.0	1.0						4.1	11.3
NNE	.7	1.4	1.4		.3						3.7	7.5
NE	.3	1.4		.3							2.0	6.0
ENE	.7	1.7	.7	.3							3.1	6.7
E	.7	2.0	.7								3.4	4.8
ESE	.7	.7									.7	3.0
SE	.3	1.0	1.0								2.4	6.0
SSE		1.4	1.7	1.4							4.4	9.4
S	2.4	9.9	6.8	8.5	2.7						30.3	9.2
SSW	.3	2.4	6.1	4.4	1.4						14.6	10.5
SW	.7	1.4	2.0	.3	.3						4.4	7.5
WSW	.7	.7	.3	.7	.7	.3					3.1	12.3
W		1.0	1.4	2.4	.7						5.4	11.1
WNW		.7	1.4	2.4	1.4						5.4	12.6
Ww	.7	2.0	1.0	1.7							5.4	8.0
WNW	.7	2.7	2.4	1.4	.3						7.5	8.5
VARIABLE												
CALM	////////////////////											////
TOTALS	7.1	20.6	28.2	24.6	8.8	.3					130.0	9.2

TOTAL NUMBER OF OBSERVATIONS: 294

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS(LST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.3	1.7	.3	.3	.7							4.6	7.3
NNE		0.0	1.0		.7							3.6	8.5
NE		0.0	.3	.3								2.6	6.0
NNE	1.7	1.3	1.0	1.0								4.3	7.5
E	.3	.7	1.0									1.7	6.4
ESE				.3								.3	14.0
SE		.7	.3	.3								1.0	10.0
SSE	.3	1.7	1.7	1.3	.7							5.0	10.5
S	1.3	6.6	11.9	6.6	1.0							31.4	9.7
SSW	.3	5.3	4.0	4.3	1.0							14.9	9.7
SW		1.7	.3	1.3	.3							3.6	9.5
WSW	.3	1.0	.7	1.3	.7							4.0	11.3
W	.7	1.7	.3	1.7	1.0							4.3	11.8
WSW	.7	1.7	2.3	1.7	1.3							6.9	10.5
NW		1.0	1.3	1.0	1.3			.3				5.0	13.5
NNW	.7	1.7	1.3	.7								5.6	6.1
VARIABLE													
CAL"	////////////////////											1.3	////
TOTALS	5.6	30.2	27.7	24.1	5.6			.3				100.0	9.4

TOTAL NUMBER OF OBSERVATIONS: 303

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221132 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS (LST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-7	8-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56				
N	.4	2.1	.8	.7	.7							4.7	8.6
NNE	.4	2.0	1.2	.3	.2	.1						4.2	7.5
NF	.2	1.2	.5	.4								2.3	6.7
ENE	.7	1.4	.5	.4								2.9	6.4
E	.3	.7	.5	.1	.0							1.7	6.1
ESE	.2	.4	.2	.0								.7	5.6
SE	.1	.5	.6	.1								1.4	7.0
SSE	.2	1.2	1.2	1.7	.4							4.9	10.1
S	1.6	2.8	10.9	9.1	1.6	.0						33.0	9.3
SSW	1.7	4.6	4.6	2.9	.9	.1						15.2	9.1
SW	.2	1.4	1.0	1.0	.3	.1						4.0	9.2
WSW	.2	.7	.5	.5	.6	.2						3.2	11.6
W	.2	.9	.7	1.5	1.1	.2						4.9	12.5
WNW	.2	.4	1.2	2.3	.7	.1						4.9	12.3
NW	.2	1.2	1.3	1.0	.6	.1	.1	.0				4.6	10.9
NNW	.4	2.0	1.2	1.3	.3	.0						5.4	8.7
VARIABLE													
CALM	////////////////////											2.1	////
TOTALS	6.7	30.5	27.0	25.0	7.5	1.0	.1	.0				100.0	9.2

TOTAL NUMBER OF OBSERVATIONS: 2462

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS(IST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED (IN KNOTS)										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N		.7	1.0	.3	.7	.3					2.4	12.3
NNE	1.4	1.4	2.4	.3	.3						5.9	7.0
NE		.7									.7	5.0
NNE	.7	1.7									2.1	4.3
E		1.7									1.7	4.7
ESE	.3	.7	.3								1.4	5.5
SE	.7	.7	.3	.3							1.7	7.6
SSE		.7	.3	2.8	.3						3.8	13.5
S	2.4	8.3	17.6	10.0	3.5	1.0					42.9	9.7
SSW	.7	5.2	7.3	4.6	.7	.3					18.7	9.7
SW	.3		2.1	.7							3.1	10.0
WSW		.3	.3	1.0	.7	.3					2.9	14.6
W	.7	1.4		2.4	.7						4.8	10.3
WNW				1.4	.3	.7					2.1	16.0
NW			.3	.7	.3						1.4	13.3
NNW	.7	.7	.7	.7	.3						2.8	9.1
VARIABLE												
CALM	////////////////////										2.9	////
TOTALS	5.7	22.9	32.9	25.6	7.6	2.4					100.0	9.6

TOTAL NUMBER OF OBSERVATIONS: 289

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAL

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM EQUALLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS(IST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.7	1.7	1.4	1.0	.3							4.5	8.5
NNE	1.7	1.0	1.0	1.0								4.8	6.7
NE		.7	.3									1.0	6.7
ENE		.7	.3									1.0	6.0
E	.2	.3	.3									1.0	5.3
ESE		.7										.3	6.0
SE	.7	.7		.3								1.4	6.5
SSE	.3	.7	1.0	1.7	.7							4.5	11.2
S	2.7	13.1	19.2	11.3	2.7	.7						49.8	9.3
SSW	.3	5.5	3.1	3.3	.7							13.4	8.7
SW		.7	.3	1.0	.3							2.4	11.9
WSW		.3	.3	1.4	.3							2.4	13.3
W	.7	.7		.3	1.4							2.7	12.0
WSW	.7	1.0	1.0	1.4		.3						4.5	10.2
NW	.3	1.7	.3	1.0								2.7	7.8
NNW		.3	.3	.3	.3							1.4	10.3
VARIABLE													
CALM	////////////////////											2.1	////
TOTALS	7.9	24.2	29.2	24.7	6.9	1.0						100.0	9.1

TOTAL NUMBER OF OBSERVATIONS: 291

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS(IST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
0	1.2	2.4	1.4	.7	.3						5.9	7.4
NNE		1.7	.3	1.0							3.1	7.8
NE	.7	.7									1.4	4.0
NNE	.7	.7									1.4	3.3
E		1.7	.3								1.4	6.0
ESE		.3	.7								1.0	8.7
SE												
ESE			1.4	.7	1.0						2.8	12.6
S	2.8	1.7	15.2	14.1	1.7						46.6	9.2
SSW	1.0	4.1	6.6	5.8	1.7						19.0	9.6
SW		1.0		.7	.3						2.1	9.5
WSW		.3	.3	.7	.7						2.1	13.7
W			.7	1.4	.3						2.4	13.6
WNW		1.0	.7	1.7	.3	.3					4.1	12.3
NW		.3	.7	1.0	.3						2.4	12.4
NNW		.7	.7								1.4	6.0
VARIABLE												
CALM											3.4	////
TOTALS	6.2	26.9	29.0	27.2	6.9	.3					100.0	9.1

TOTAL NUMBER OF OBSERVATIONS: 290

GLOBAL CLIMATOLOGY BRANCH
USAF/CIAC
AIR WEATHER SERVICE/MAL

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS(1ST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-7	8-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.3	2.4	.7								3.4	6.0
NNE	.7	2.0	.3	1.4							4.4	7.1
NE		1.0									1.0	4.7
ENE	.7	.7									1.7	3.3
E	.7	1.0	.7								2.0	5.0
ESE	.3		.7								1.0	6.7
SE		1.4	.3								1.7	5.6
ESC	.3	.3	1.0	2.4	.3						4.4	11.8
S	2.4	11.0	15.3	16.0	2.7	.7					48.6	9.9
SSW	.7	4.6	3.1	7.4	.7	.3					12.9	9.1
SW			.3	1.7		.3					2.4	13.9
WSW	.3	.7	.7	.3	1.0						3.1	11.4
W		.7	.7	2.7	1.4						5.1	13.7
WNW			.7	.7							1.4	11.5
NW	.3	.3	1.0	.3	.3						2.4	9.9
NNW		.7	.7	1.4							2.7	9.5
VARIABLE												
CALM	////////////////////										2.4	////
TOTALS	6.5	26.7	26.2	30.3	6.5	1.4					100.0	9.4

TOTAL NUMBER OF OBSERVATIONS: 294

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS(LST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N		1.7	1.7	.3							3.8	7.6
NNE	.3	.7		.7	.3						2.1	10.2
NE	.3	.3									.7	3.0
NNE		.7									.7	5.0
E	.3	.7		.3							1.4	6.0
ESE	.3	.3									.7	3.0
SE		.7	.7	.3							1.7	8.0
ESE	.3	1.0	1.4	.3	.3						3.5	8.3
S	1.0	13.1	13.8	16.3	4.8	.7					49.8	10.5
SSW	.7	3.9	3.5	4.2	1.7						13.8	9.9
SW	.3	.7	.3	1.0							2.4	8.6
WSW		.3	1.0	1.7		.7					3.5	13.7
W			.3	2.8	.7						3.8	14.5
WNW		1.4	.3	1.4	.7						3.8	10.9
NW		1.0	.7	1.0							2.8	9.3
NNW		2.1			.3						2.4	7.0
VARIABLE												
CALM	////////////////////										3.1	////
TOTALS	3.5	28.7	23.9	30.4	9.0	1.7					100.0	9.8

TOTAL NUMBER OF OBSERVATIONS: 289

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221150 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-R6
MONTH: NOV HOURS(LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	2.3	1.0	.7							4.4	6.8
NNE	.3	1.7	.3	1.4	.3						3.4	9.9
NE	.7	.7									1.4	4.0
ENE		1.7									1.0	4.0
E		.7	.3	.3							1.4	8.0
ESE												
SE	.3	.3	.7								1.4	6.0
SSE	.3	1.0	.3	1.4							3.0	9.8
S	2.3	13.2	14.9	13.9	2.4	1.0					47.3	9.8
SSW	1.4	2.0	6.1	5.1	1.0						15.5	10.0
SW	.7	1.4	1.0	1.4	.3						4.7	8.2
WSW		.3	.7	.7	.7		.3				2.7	15.4
W		.7	1.0	2.4	.7						4.7	12.6
WNW		.3	.7	.7	.7						2.4	12.3
NW	.3	.3	.7	.3							1.7	7.2
NNW	.7	2.0		.7							3.0	6.7
VARIABLE												
CALM	////////////////////////////////////										2.0	////
TOTALS	7.1	27.0	27.7	25.7	6.1	1.0	.3				100.0	9.4

TOTAL NUMBER OF OBSERVATIONS: 296

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS (LST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.7		1.4	1.4	.3							3.7	10.3
NNE	.3	2.7	.3	.7		.3						3.7	8.3
NE	1.4	1.4	.3									3.0	3.6
NNE	.7	.7	.3									1.7	4.8
E		.3										.3	6.0
ESE	.3			.3								.7	9.0
SE	.7	.3										.7	4.0
SSE		.3	2.7	2.0	1.0							6.1	12.1
S	1.4	10.4	16.9	10.8	2.4	.3						42.2	9.5
SSW	1.4	4.7	5.4	4.7	.7	.3						17.2	9.4
SW		1.4	.3	2.4	.3							4.4	11.3
WSW		.3	.3	1.0	.7							2.4	13.4
W	.3	.3	1.0	2.0	.7	.3						4.7	12.6
NNW		.3	.3		.7							1.4	12.5
NW		1.0	1.0	.7	.7							3.4	10.6
NNW		1.0	1.0	1.0								3.0	8.7
VARIABLE													
CALM	////////////////////											1.4	////
TOTALS	6.4	25.0	31.4	27.0	7.4	1.4						100.0	9.5

TOTAL NUMBER OF OBSERVATIONS: 296

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221112 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS(LST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N		1.0	1.4	.3	.3							3.0	9.2
NNE	.7	1.0	.7	1.4	.3							4.1	9.3
NE	.3	1.0	.3									1.7	4.8
ENE	.3	1.0										1.4	4.0
E	.3	.7	.3									1.0	4.7
ESE				.3								.3	12.0
SE		.7										.7	6.0
SSE	.7	1.4	1.0	1.7	.7							5.1	10.5
S	2.4	12.6	15.5	13.5	2.0	.3	.3					45.9	9.7
SSW	1.0	5.7	3.4	5.7	1.0	.3						17.2	9.4
SW	.3	.7	.3	.3	.7							2.4	11.1
WSW	.7	1.0	.3	1.7	.3							4.1	10.1
W		.7	.7	1.7	2.0							5.1	13.7
WNW		.3		.7								1.0	11.3
NW	.7	.7	1.4	.3	.3		.3					3.7	10.4
NNW			1.0	.3	.3							1.7	11.4
VARIABLE													
CALM	////////////////////////////////////											1.7	////
TOTALS	7.1	27.4	26.4	28.0	8.1	.7	.7					100.0	9.6

TOTAL NUMBER OF OBSERVATIONS: 276

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS(1ST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-63	
N	.4	1.4	1.2	.6	.2	.0					3.9	8.2
NNE	.7	1.4	.7	1.0	.2	.0					3.9	8.0
NE	.4	.8	.1								1.4	4.3
NNE	.7	.8	.1								1.2	4.3
E	.7	.7	.3	.1							1.2	5.7
ESE	.0	.0	.2	.1							.7	6.9
SE	.0	.6	.3	.1							1.2	6.5
ESE	.0	.6	1.2	1.6	.6						4.1	11.3
S	2.1	11.8	16.1	13.2	2.8	.6	.0				46.6	9.7
SSW	.9	4.5	4.8	4.7	1.0	.2					16.0	9.5
SW	.0	.7	.6	1.2	.3	.0					3.0	10.4
WSW	.1	.5	.5	1.1	.6	.1	.0				2.9	13.0
W	.1	.5	.6	2.0	1.0	.0					4.2	12.9
WNW	.1	.6	.5	1.0	.3	.1					2.6	11.9
W	.0	.5	.8	.7	.3		.0				2.6	10.0
WNW	.1	.5	.6	.6	.2						2.3	8.5
VARIABLE												
CALM	////////////////////										2.3	////
TOTALS	6.4	26.6	26.3	27.8	7.3	1.2	.1				100.0	9.4

TOTAL NUMBER OF OBSERVATIONS: 2341

GLOBAL CLIMATOLOGY PROJECT
USAFETAC
AIR WEATHER SERVICE/PAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS(IST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N		.7	.3	.3		.3						1.7	11.4
NNE		.7	1.0	1.7	.7							4.0	11.6
NF	.3			.3								.7	9.0
ENE		1.7	.3									1.7	4.8
E	.7			.3								1.0	5.3
ESE													
SE				.3								.3	12.0
SSE	.7	.7	1.3	1.0								3.7	8.2
S	2.3	11.3	20.6	12.3	3.0							49.5	9.3
SSW	.7	4.7	7.3	4.3	1.7	.3						18.6	10.1
SW	.7		1.0	2.3	1.0							4.7	13.1
WSW		.7	.3	.3	.7		.3					2.0	15.5
W	.7	.3	.7	.7	.7							2.7	10.8
WNW			1.0	1.3	1.7							4.0	14.8
NW			.3	.3	.3	.3						1.3	16.5
NNW		.7	.7	.7	.7							2.7	12.3
VARIABLE													
CALM	////////////////////////////////////											1.7	////
TOTALS	5.0	20.6	34.9	26.2	10.3	1.7	.3					100.0	10.0

TOTAL NUMBER OF OBSERVATIONS: 701

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221110 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS(LST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	1.0	.7	.7	.3	.3					3.6	9.8
NNE	.7	.7	1.3	1.6	.3	.3					4.6	11.9
NE		.7	.3								1.0	6.7
NNE		.7									.7	5.0
E		.7	.3								.7	7.0
ESE	.7										.7	2.0
SE			.3		.3						.7	12.5
SSE	.7	.7	1.6	.7							2.9	7.3
S	1.3	10.5	18.6	16.0	2.3						48.7	9.8
SSW	1.0	2.9	7.8	4.2	2.0	.7					18.6	10.4
SW	1.0	1.0		1.6	.7	.3					4.6	10.5
WSW	.7	.7		.7		.3					1.6	11.4
W	.7		1.0	.3	1.0						2.6	12.4
WNW			.7	1.0							1.6	12.0
NW			.3	1.3	2.0						3.6	16.2
NNW	.7	.7	.7	.7							2.3	7.7
VARIABLE												
CALM	////////////////////										1.6	////
TOTALS	6.5	19.0	33.7	25.4	8.8	2.7					100.0	10.0

TOTAL NUMBER OF OBSERVATIONS: 306

GLOBAL CLIMATOLOGY BRANCH
USAF/CIAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221150 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS(1ST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-2	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	.7	1.0	2.0	.7						4.7	12.1
NNE	.3	.7		1.4		.3					2.4	13.0
NL	.7		.3								1.0	4.0
NNE	.3	1.4									1.7	4.9
E			.3	.7							.7	10.0
ESE		.7		.3							1.0	8.0
SE				.7							.7	13.0
SSE	.7	1.4	.3								1.7	5.2
S	1.1	10.6	15.6	15.9	2.4						47.5	9.4
SSW	1.4	4.1	6.1	5.2	1.4						22.0	10.4
SW			1.0	1.0	.7						2.7	13.5
WSW				1.0	.7						1.4	16.3
W	.7		.3	1.4	1.0	.3					3.7	13.3
WNW	.7		.7	2.0	1.0						4.1	13.3
NW	.7				.7						1.0	12.7
WNW		.7	.3	.7	.3						1.7	10.6
VARIABLE												
CALM	////////////////////										2.0	////
TOTALS	11.1	19.7	26.1	35.6	9.5	.7					100.0	10.0

TOTAL NUMBER OF OBSERVATIONS: 295

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201120 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS (LST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N		1.0	.7	1.3	1.0	.7					4.6	13.8
NNE	.3	.7	.7	1.0	.3						3.0	10.3
NE		.7									.7	6.0
NNE		.3	.3								.7	7.0
E		.7	.3								1.0	6.0
ESE		.7									.3	4.0
SE	.2	.7									.7	3.0
ESE	.3	1.0	1.0	.3	.3						3.0	8.6
S	1.3	10.5	17.5	16.8	2.6						50.6	9.7
SSW	.7	9.6	4.6	5.9	2.3	.7					18.4	10.6
SW		1.7	.3	1.7	.7						4.0	11.2
WSW		1.0		.7							1.3	7.0
W			.3	2.0	1.7	.7					4.6	17.4
WNW		.7	.3	1.3	.7						3.0	12.7
W		.3		.3		.3					1.0	14.3
WNW		.7		.7	.3						1.3	11.3
VARIABLE												
CALM	////////////////////										1.3	////
TOTALS	3.7	25.7	26.1	31.7	9.9	2.3					100.0	10.3

TOTAL NUMBER OF OBSERVATIONS: 303

GLOBAL CLIMATOLOGY BRANCH
USAFCTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 22130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS(IST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N		1.7	1.0	.7	1.3	.7						4.6	12.6
NNE	.7	.7	1.7	1.0								3.3	9.6
NNE		.7		.3								.7	6.0
NNE		.7		.3								.7	9.0
L	.3	.7										1.0	4.0
ENE				.3								.3	14.0
SE	.7											.7	2.0
ESE	.7	.7	1.3	.7	.3							3.3	8.9
S	11.0	11.0	16.5	15.8	3.3							48.8	10.1
SSW	.7	9.9	6.9	6.3	1.7	1.7						22.4	10.2
SW	.7	.7	1.7	1.0								3.6	9.1
WSW		.3	.7									1.0	6.7
W			.7	1.3	1.3	.7						4.0	17.0
WSW			.3	1.7	1.0							2.6	15.1
W				1.0		.3						1.3	15.3
WSW						.3						.3	25.0
VARIABLE													
CALM	////////////////////											1.3	////
TOTALS	5.7	21.7	30.7	37.0	8.9	2.5						100.0	10.9

TOTAL NUMBER OF OBSERVATIONS: 723

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS (LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N		.7	.3	1.0	.7	.3	.3					3.3	15.4
NNE		.7	1.0	1.0	1.0							3.6	12.1
NE			.3									.3	8.0
ENE	.7	.3										1.0	2.7
E		.3	.3									.7	6.0
ESE		.7										.3	4.0
SE		1.0	.3									1.3	5.0
SSE	.3	.7	1.6	1.6								3.9	10.0
S	.3	10.4	19.0	15.7	2.9							48.7	9.9
SSW	1.3	5.2	3.9	6.9	1.6	.3						19.3	10.2
SW	.7	.7	1.0	1.0	.7							3.6	10.5
WSW		.7	.3	.7	.7							2.0	14.3
W	.3	.7	1.3	.7	.7							3.6	10.5
WNW		1.0	.7	2.3	.3							4.2	11.8
NW				.7	.3							1.0	15.7
NNW				1.0		.7						1.6	17.6
VARIABLE													
CALM	////////////////////											1.6	////
TOTALS	3.6	21.9	30.1	32.4	8.9	1.3	.3					100.0	10.3

TOTAL NUMBER OF OBSERVATIONS: 356

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS (LST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
V	.3	.7	.7	1.0	1.0	.3	.3				4.3	14.1
NNE		1.7	.3	.3	.7						3.0	9.6
NE	.3	.3	.7								1.3	6.0
ENE			.3								.3	8.0
E		1.7									1.0	4.0
ESE												
SE			.7								.7	8.0
SSE	.7	1.7	1.0		.3						3.0	7.2
S	1.0	7.6	20.8	14.9	2.3						46.5	10.2
SSW	.3	5.0	8.3	6.9	1.3						21.8	9.8
SW	.7	.7	.3	.7	1.3	.3					4.0	12.4
WSW		.7	.3	1.3			.3				2.6	13.4
W		.7	.3	.7	.7	.3					2.3	14.4
WNW	.3		1.0	.7	.7						2.6	11.5
NW		.7	.3	.7	1.0						2.6	12.6
NNW			1.0	1.0	.3						2.3	12.4
VARIABLE												
CFLP	////////////////////										1.7	////
TOTALS	3.6	14.4	36.0	29.1	9.6	1.0	.7				100.0	10.3

TOTAL NUMBER OF OBSERVATIONS: 303

GLOBAL CLIMATOLOGY BRANCH
USAF/CIAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MUMMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS(LST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N		.7	.7	1.0	1.0		.3					3.6	14.2
NNE		1.0	2.0	.3	.3							3.6	9.7
NE		1.0	.3									1.3	5.5
ENE		.7										.7	4.0
E	.3	1.0										1.3	4.0
ESE	.3	.7										.7	3.0
SE		.3	.3		.3							1.0	11.0
SSE		.7	1.3	.3	.3							2.6	9.6
S	1.0	10.9	16.5	14.2	2.3							44.9	9.6
SSW	1.0	3.6	9.6	5.3	2.3	.3						22.1	10.6
SW		1.0	.3	1.3	1.7							4.3	13.2
WSW			.7									.7	8.0
W			1.7	1.3	.7							3.3	13.2
WNW			.7	.3	1.0							2.0	13.8
WW		1.7	.3	1.7	.3							3.6	10.5
NNW	.7		.3	.7	.3							1.7	10.2
VARIABLE													
CALM	////////////////////											2.6	////
TOTALS	3.0	22.4	34.3	26.4	10.6	.3	.3					100.0	9.9

TOTAL NUMBER OF OBSERVATIONS: 303

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS(1ST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.2	.7	.7	1.0	.7	.3	.1					3.8	13.0
NNE	.2	.7	1.0	1.0	.4	.1						3.4	11.0
NE	.2	.4	.2	.1								.9	6.2
ENE	.1	.6	.1	.0								.9	5.2
E	.2	.5	.2	.1								.9	5.5
ESE	.1	.2		.1								.4	5.6
SE	.1	.7	.2	.1	.1							.7	7.9
SSE	.4	.7	1.2	.5	.2							3.0	8.4
S	1.5	11.7	18.1	15.2	2.6							48.2	9.8
SSW	.8	4.5	6.8	6.1	1.8	.4						20.5	10.3
SW	.4	.6	.7	1.3	.8	.1						3.9	11.7
WSW	.7	.4	.3	.5	.2	.7	.1					1.6	12.6
W	.2	.7	.7	1.0	1.0	.2						3.3	13.9
WNW	.1	.7	.7	1.3	.8							3.0	13.1
NW	.7	.3	.2	.7	.6	.1						1.9	13.8
NNW	.1	.7	.4	.6	.2	.1						1.7	11.9
VARIABLE													
CALM	////////////////////											1.7	////
TOTALS	4.7	21.7	31.5	29.8	9.4	1.4	.2					100.0	10.2

TOTAL NUMBER OF OBSERVATIONS: 2420

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-87
MONTH: ALL HOURS(1ST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	3.7	2.9	2.3	.5	.1	.0				9.8	8.9
NNE	.4	1.6	1.6	1.1	.2	.0	.0				4.9	8.6
NE	.2	1.1	1.0	.4	.0						2.7	7.6
ENE	.3	1.0	.7	.3	.0						2.2	7.0
E	.2	.8	.6	.3	.0						1.9	7.1
ESE	.1	.4	.3	.1	.0						.9	6.3
SE	.1	.6	.4	.1	.0						1.2	6.8
SSE	.7	1.1	1.1	.8	.2	.0					3.5	9.0
S	1.4	6.7	10.8	8.8	1.7	.2	.0				31.1	9.5
SSW	.9	4.6	5.4	4.3	1.0	.1	.0				16.3	9.3
SW	.3	1.1	1.0	1.1	.4	.1	.0				4.0	9.6
WSW	.0	.5	.6	.7	.2	.1	.0				2.3	10.2
W	.0	.6	.9	1.3	.7	.1	.0	.0			3.9	11.8
WNW	.0	.5	.9	1.4	.4	.1					3.5	11.3
NW	.0	1.0	1.2	1.2	.4	.1	.0	.0			4.1	10.2
NNW	.4	1.9	1.6	1.4	.4	.1	.0				5.8	9.0
VARIABLE												
CALM	////////////////////										1.8	////
TOTALS	6.1	28.0	31.1	25.6	6.1	.9	.1	.0			100.0	9.1

TOTAL NUMBER OF OBSERVATIONS: 28491

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-87
MONTH: ALL HOURS(IST): ALL

CEILINGS 200 TO 1400 FEET WITH VISIBILITIES 1/2 MILE OR MORE
AND/OR
CEILINGS 200 FEET OR MORE WITH VISIBILITIES 1/2 TO 2-1/2 MILES

DIRECTION (DUPLEES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.0	3.1	4.1	4.9	1.3	.1	.1					14.2	10.5
NNE	.4	1.7	2.6	2.3	.5	.1	.0					7.7	9.8
NE	.2	1.4	1.3	.6	.1							3.6	6.0
NNE	.3	1.0	.6	.3								2.3	6.7
N	.2	.5	.5	.3	.1							1.6	7.3
NSE	.1	.3	.1	.1	.0							.6	6.5
SE	.1	.4	.2	.1	.0							.7	6.4
ESE	.2	.7	.7	.6	.1	.0						2.3	8.9
S	1.6	8.2	8.4	5.9	1.0	.2	.0					25.3	8.8
SSW	1.1	4.5	4.5	3.1	.5	.1						13.6	8.4
SW	.3	.9	.7	.6	.1	.0						2.7	8.5
WSW	.2	.5	.4	.2	.1	.0	.0					1.4	8.2
W	.2	.5	.5	.9	.5	.1	.0					2.8	11.6
WNA	.1	.4	.8	1.5	.7	.1						3.7	12.6
NW	.0	1.3	1.8	1.8	.7	.1	.0	.0				6.0	11.0
NNW	.4	2.6	2.5	2.7	.8	.2	.0					9.2	9.9
VARIABLE													
CAL"	////////////////////////////////////											2.4	////
TOTALS	6.4	25.1	29.6	25.7	6.4	1.1	.2	.0				100.0	9.2

TOTAL NUMBER OF OBSERVATIONS: 7742

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CEILING VERSUS VISIBILITY AND SKY COVER SUMMARIES

CEILING VERSUS VISIBILITY SUMMARY

THIS SUMMARY IS A BIVARIATE FREQUENCY DISTRIBUTION BY CLASSES OF CEILING FROM "0" THROUGH EQUAL TO OR GREATER THAN 23,620 FEET AND AS A SEPARATE CLASS "NO CEILING", VERSUS VISIBILITY IN 16 CLASSES FROM ZERO THROUGH EQUAL TO OR GREATER THAN 10 MILES.

DATA DERIVED FROM HOURLY OBSERVATIONS.

FREQUENCY DISTRIBUTION PRESENTED BY THE STANDARD 3-FOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

NOTES:

BEGINNING IN 1969, METAR STATIONS REPORTED VISIBILITIES TO 5 MILES AND GREATER THAN 6 MILES. THEREFORE THE COLUMN FOR VISIBILITIES EQUAL TO OR GREATER THAN 10 MILES APPEAR BLANK.

AS A RULE, AIRWAYS STATIONS NORMALLY REPORT VISIBILITIES TO 6 MILES AND 7 OR GREATER, HOWEVER SOME STATIONS REPORT HIGHER VALUES. THEREFORE, THE 10 MILE VISIBILITY COLUMN SOMETIMES CONTAIN SMALL PERCENTAGE VALUES. HOWEVER, THESE VALUES ARE OF LITTLE MEANING AND SHOULD BE DISREGARDED.

FOR METAR CIVILIAN STATIONS REPORTING "CAVOK", ALL CEILINGS ABOVE 5000 FEET WERE SUPPRESSED TO 5000 FEET. THEREFORE, NO PERCENT VALUES APPEAR ABOVE 5000 FEET.

SKY COVER SUMMARY

PRESENTS PERCENTAGES OF SKY COVER IN EITHER 10THS OF COVERAGE OR "AIRWAYS CLASSIFICATIONS".

DATA SUMMARIZED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

ALSO PRESENTED ARE MEAN SKY COVERS.

FOR AIRWAY STATIONS, THE CONVERSION FROM THE AIRWAYS DESIGNATIONS TO 10THS FOR PRESENTATION ARE:

CLEAR	-	0/10
SCATTERED	-	3/10
BROKEN	-	4/10
OVERCAST	-	10/10
OBSCURED	-	10/10

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 22113 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN HOURS(IST): 0000-0200

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN	GT	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
FEET	100	90	80	70	60	50	40	32	24	20	16	12	10	8	5	4	0
NO CEIL	17.6	22.1	23.5	25.0	30.4	31.1	33.6	35.3	35.6	36.3	36.3	37.4	37.7	38.1	38.1	38.1	
GE 20000	20.1	24.6	26.0	28.0	32.9	33.6	36.0	37.7	38.1	38.8	39.9	39.8	40.1	40.5	40.5	40.5	
GE 15000	20.1	24.6	26.0	28.0	32.9	33.6	36.0	37.7	38.1	38.8	39.9	39.8	40.1	40.5	40.5	40.5	
GE 10000	20.1	24.6	26.0	28.0	32.9	33.6	36.0	37.7	38.1	38.8	39.9	39.8	40.1	40.5	40.5	40.5	
GE 14000	20.1	24.6	26.0	28.0	32.9	33.6	36.0	37.7	38.1	38.8	39.9	39.8	40.1	40.5	40.5	40.5	
GE 12000	20.1	24.6	26.0	28.0	32.9	33.6	36.0	37.7	38.1	38.8	39.9	39.8	40.1	40.5	40.5	40.5	
GE 10000	29.0	33.6	35.6	38.4	43.3	44.6	47.4	50.9	51.2	51.9	52.2	53.3	53.6	54.0	54.0	54.0	
GE 9000	28.0	33.6	35.6	38.4	43.3	44.6	47.4	50.9	51.2	51.9	52.2	53.3	53.6	54.0	54.0	54.0	
GE 8000	28.0	33.6	35.6	38.4	43.3	44.6	47.4	50.9	51.2	51.9	52.2	53.3	53.6	54.0	54.0	54.0	
GE 7000	28.0	33.6	35.6	38.4	43.3	44.6	47.4	50.9	51.2	51.9	52.2	53.3	53.6	54.0	54.0	54.0	
GE 6000	28.4	33.9	36.0	38.8	43.6	45.0	47.8	51.2	51.6	52.2	52.6	53.6	54.0	54.3	54.3	54.3	
GE 5000	28.4	33.9	36.0	38.8	43.6	45.0	47.8	51.2	51.6	52.2	52.6	53.6	54.0	54.3	54.3	54.3	
GE 4500	28.4	34.3	36.3	39.1	43.9	45.3	48.1	51.6	51.9	52.6	52.9	54.0	54.3	54.7	54.7	54.7	
GE 4000	30.8	36.7	38.8	41.5	46.4	47.8	50.5	54.0	54.3	55.0	55.4	56.4	56.7	57.1	57.1	57.1	
GE 3500	30.8	36.7	38.8	41.5	46.4	47.8	50.5	54.3	54.7	55.4	55.7	56.7	57.1	57.4	57.4	57.4	
GE 3000	31.8	37.7	39.8	42.6	47.4	49.8	51.6	55.4	55.7	56.4	56.7	57.8	58.1	58.5	58.5	58.5	
GE 2500	39.1	48.8	51.2	54.3	59.5	61.0	64.4	69.2	70.2	71.3	71.6	72.7	73.7	74.0	74.0	74.0	
GE 2000	39.8	49.5	51.9	55.0	60.2	62.3	65.1	69.9	70.9	72.0	72.3	73.4	74.4	74.7	74.7	74.7	
GE 1800	40.5	50.2	52.6	55.7	60.9	63.0	65.7	70.6	71.6	72.7	73.0	74.0	75.1	75.4	75.4	75.4	
GE 1500	41.2	50.9	53.6	57.1	62.3	64.4	67.1	72.0	73.0	74.0	74.4	75.4	76.5	76.8	76.8	76.8	
GE 1200	44.6	57.4	61.9	66.4	73.4	75.6	79.6	85.5	86.9	87.9	88.6	89.6	90.7	91.0	91.0	91.0	
GE 1000	45.3	58.1	61.6	67.1	74.0	76.5	80.3	86.2	87.5	88.6	89.3	90.3	91.3	91.7	91.7	91.7	
GE 900	45.3	58.1	61.6	67.1	74.0	76.5	80.3	86.2	87.5	88.6	89.3	90.3	91.3	91.7	91.7	91.7	
GE 800	46.0	58.8	62.3	67.8	74.7	77.2	81.0	86.9	88.2	89.3	90.0	91.0	92.0	92.4	92.4	92.4	
GE 700	46.7	60.2	64.0	69.6	76.5	78.9	82.7	88.6	90.0	91.0	91.7	92.7	93.8	94.1	94.1	94.1	
GE 600	46.7	60.2	64.0	69.6	76.5	78.9	82.7	88.6	90.0	91.0	91.7	92.7	93.8	94.1	94.1	94.1	
GE 500	46.7	60.2	64.4	69.9	76.8	79.6	83.7	89.6	91.0	92.0	92.7	93.8	94.8	95.2	95.2	95.2	
GE 400	46.7	60.2	64.4	69.9	76.8	79.6	83.7	89.6	91.0	92.0	92.7	93.8	94.8	95.2	95.5	95.5	
GE 300	46.7	60.2	64.4	69.9	76.8	79.6	83.7	89.6	91.0	92.0	92.7	93.8	94.8	95.2	95.8	95.8	
GE 200	46.7	60.2	64.4	69.9	76.8	79.6	83.7	89.6	91.0	92.0	92.7	93.8	94.8	95.2	96.9	96.9	
GE 100	46.7	60.2	64.4	69.9	76.8	79.6	83.7	89.6	91.0	92.0	92.7	93.8	94.8	95.2	97.9	98.6	
GE	46.7	60.2	64.4	69.9	76.8	79.6	84.1	90.0	91.3	92.7	93.8	94.8	96.5	97.2	97.9	100.0	

TOTAL NUMBER OF OBSERVATIONS: 289

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 76-67
MONTH: JAN. HOURS(LEST): 0300-0500

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS																
	GE 1	GE 2	GE 3	GE 4	GE 5	GE 6	GE 7	GE 8	GE 9	GE 10	GE 12	GE 14	GE 16	GE 18	GE 20	GE 25	GE 30
NO CEIL	19.4	23.1	24.1	25.5	27.6	30.3	31.6	32.7	33.3	33.3	33.7	34.0	34.7	34.7	34.7	34.7	34.7
GE 20000	21.1	25.2	26.2	27.6	29.6	32.3	33.7	34.7	35.4	35.4	35.7	36.1	36.7	36.7	36.7	36.7	36.7
GE 18000	21.1	25.2	26.2	27.6	29.6	32.3	33.7	34.7	35.4	35.4	35.7	36.1	36.7	36.7	36.7	36.7	36.7
GE 16000	21.1	25.2	26.2	27.6	29.6	32.3	33.7	34.7	35.4	35.4	35.7	36.1	36.7	36.7	36.7	36.7	36.7
GE 14000	21.1	25.2	26.2	27.6	29.6	32.3	33.7	34.7	35.4	35.4	35.7	36.1	36.7	36.7	36.7	36.7	36.7
GE 12000	21.1	25.2	26.2	27.6	29.6	32.3	33.7	34.7	35.4	35.4	35.7	36.1	36.7	36.7	36.7	36.7	36.7
GE 10000	26.5	33.0	34.4	37.8	40.8	43.9	46.6	48.3	49.3	49.3	49.7	50.0	50.7	50.7	50.7	51.0	51.0
GE 9000	26.5	33.0	34.4	37.8	40.8	43.9	46.6	48.3	49.3	49.3	49.7	50.0	50.7	50.7	50.7	51.0	51.0
GE 8000	26.5	33.0	34.4	37.8	40.8	43.9	46.6	48.3	49.3	49.3	49.7	50.0	50.7	50.7	50.7	51.0	51.0
GE 7000	26.5	33.0	34.4	37.8	40.8	43.9	46.6	48.3	49.3	49.3	49.7	50.0	50.7	50.7	50.7	51.0	51.0
GE 6000	26.9	33.3	34.7	38.1	41.2	44.2	46.9	48.6	49.7	49.7	50.0	50.3	51.0	51.0	51.0	51.0	51.4
GE 5000	26.9	33.7	35.0	38.4	41.5	44.6	47.3	49.0	50.0	50.0	50.3	50.7	51.4	51.4	51.4	51.4	51.7
GE 4000	28.2	35.7	37.4	41.9	45.2	48.3	51.0	52.7	53.7	53.7	54.1	54.4	55.1	55.1	55.1	55.4	55.4
GE 3000	28.9	36.4	38.1	42.5	45.9	49.0	51.7	53.4	54.4	54.4	54.8	55.1	55.8	55.8	55.8	56.1	56.1
GE 2000	29.6	37.1	39.1	43.5	46.9	50.0	52.7	54.4	55.4	55.4	55.8	56.1	56.8	56.8	56.8	57.1	57.1
GE 1500	37.1	47.6	50.3	55.8	59.5	63.3	66.7	68.7	70.4	70.4	70.7	71.1	71.8	71.8	71.8	72.1	72.1
GE 1200	38.1	48.6	51.4	56.3	60.5	64.3	67.7	69.7	71.4	71.4	71.8	72.1	72.8	72.8	72.8	73.1	73.1
GE 1000	38.1	48.6	51.4	56.3	60.5	64.3	67.7	69.7	71.4	71.4	71.8	72.1	72.8	72.8	72.8	73.1	73.1
GE 800	39.1	49.6	52.4	57.5	61.7	65.0	68.4	70.4	72.1	72.1	72.4	72.8	73.5	73.5	73.5	73.8	73.8
GE 700	39.1	50.3	53.4	59.2	62.9	66.7	70.1	72.1	73.8	73.8	74.1	74.5	75.2	75.2	75.2	75.5	75.5
GE 600	47.5	57.5	61.9	67.0	73.1	77.6	82.3	85.7	87.8	89.1	89.5	89.8	91.2	91.2	91.2	91.5	91.5
GE 500	44.0	58.2	61.5	67.7	73.8	78.2	83.0	86.4	88.4	89.8	90.1	90.5	91.8	91.8	91.8	92.2	92.2
GE 400	44.0	58.5	61.9	68.0	74.1	78.6	83.3	86.7	88.8	90.1	90.5	90.8	92.2	92.2	92.2	92.5	92.5
GE 300	44.6	58.6	62.2	68.4	74.5	78.9	83.7	87.1	89.1	90.5	90.8	91.2	92.5	92.5	92.5	92.9	92.9
GE 200	45.0	59.9	63.3	69.4	75.5	79.9	84.7	88.4	90.5	91.8	92.5	92.9	94.2	94.2	94.2	94.6	94.6
GE 100	45.6	60.2	63.6	70.1	76.2	80.6	85.4	89.1	91.2	92.5	93.2	93.5	94.9	94.9	94.9	95.2	95.2
GE 50	45.6	60.2	63.6	70.1	76.2	80.6	85.4	89.1	91.2	92.5	93.2	93.5	94.9	94.9	94.9	95.2	95.2
GE 40	45.6	60.2	63.6	70.1	76.2	80.6	85.4	89.1	91.2	92.5	93.2	93.5	94.9	94.9	94.9	95.2	95.2
GE 30	45.6	60.2	63.6	70.1	76.2	80.6	85.4	89.1	91.2	92.5	93.2	93.5	94.9	94.9	94.9	95.2	95.2
GE 20	45.6	60.2	63.6	70.1	76.2	80.6	85.4	89.1	91.2	92.5	93.2	93.5	94.9	94.9	94.9	95.2	95.2
GE 10	45.6	60.2	63.6	70.1	76.2	80.6	85.4	89.1	91.2	92.5	93.2	93.5	94.9	94.9	94.9	95.2	95.2
GE 5	45.6	60.2	63.6	70.1	76.2	80.6	85.4	89.1	91.2	92.5	93.2	93.5	94.9	94.9	94.9	95.2	95.2
GE 2	45.6	60.2	63.6	70.1	76.2	80.6	85.4	89.1	91.2	92.5	93.2	93.5	94.9	94.9	94.9	95.2	95.2
GE 1	45.6	60.2	63.6	70.1	76.2	80.6	85.4	89.1	91.2	92.5	93.2	93.5	94.9	94.9	94.9	95.2	95.2

TOTAL NUMBER OF OBSERVATIONS: 294

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN, HOURS(LST): 0600-0800

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN	GT	GE	GE	GE	GE	GE	GE	GF	GE	GE	GE	GE	GE	GF	GE	GF	
FEET	160	90	80	60	48	40	32	24	20	16	12	10	8	5	4	0	
NO CEIL	20.2	22.6	24.4	26.1	28.2	29.6	31.4	32.4	32.4	32.8	33.1	33.4	34.5	34.5	34.5	34.5	
GE 20000	20.6	23.0	24.7	26.8	28.9	30.3	32.4	33.4	33.4	33.8	34.1	34.5	35.5	35.5	35.5	35.5	
GE 18000	20.6	23.0	24.7	26.8	28.9	30.3	32.4	33.4	33.4	33.8	34.1	34.5	35.5	35.5	35.5	35.5	
GE 16000	20.6	23.0	24.7	26.8	28.9	30.3	32.4	33.4	33.4	33.8	34.1	34.5	35.5	35.5	35.5	35.5	
GE 14000	20.6	23.0	24.7	26.8	28.9	30.3	32.4	33.4	33.4	33.8	34.1	34.5	35.5	35.5	35.5	35.5	
GE 12000	20.6	23.0	24.7	26.8	28.9	30.3	32.4	33.4	33.4	33.8	34.1	34.5	35.5	35.5	35.5	35.5	
GE 10000	27.9	31.7	33.3	37.6	40.1	41.5	44.3	45.6	45.6	46.0	46.3	46.7	47.7	47.7	47.7	47.7	
GE 9000	27.9	31.7	33.3	37.6	40.1	41.5	44.3	45.6	45.6	46.0	46.3	46.7	47.7	47.7	47.7	47.7	
GE 8000	27.9	31.7	33.3	37.6	40.1	41.5	44.3	45.6	45.6	46.0	46.3	46.7	47.7	47.7	47.7	47.7	
GE 7000	27.9	31.7	33.3	37.6	40.1	41.5	44.3	45.6	45.6	46.0	46.3	46.7	47.7	47.7	47.7	47.7	
GE 6000	27.9	31.7	33.3	37.6	40.1	41.5	44.3	45.6	45.6	46.0	46.3	46.7	47.7	47.7	47.7	47.7	
GE 5000	28.2	32.1	34.1	38.3	40.4	41.8	44.6	46.0	46.0	46.3	46.7	47.0	48.1	48.1	48.1	48.1	
GE 4500	28.6	32.4	34.5	38.3	40.3	42.2	44.9	46.3	46.3	46.7	47.0	47.4	48.4	48.4	48.4	48.4	
GE 4000	30.7	34.5	36.6	40.8	43.2	44.6	47.4	48.8	48.8	49.1	49.5	49.8	50.9	50.9	50.9	50.9	
GE 3500	31.7	35.5	37.6	41.8	44.3	45.6	48.4	49.8	49.8	50.2	50.5	50.9	51.9	51.9	51.9	51.9	
GE 3000	33.4	37.3	39.4	43.6	46.0	47.4	50.2	51.6	51.6	51.9	52.3	52.6	53.7	53.7	53.7	53.7	
GE 2500	43.6	50.2	53.7	58.9	63.1	65.2	67.9	69.3	70.0	70.4	70.7	71.1	72.1	72.1	72.1	72.1	
GE 2000	43.9	50.5	54.0	59.2	63.4	65.5	68.3	69.7	70.4	70.7	71.1	71.4	72.5	72.5	72.5	72.5	
GE 1800	44.6	51.2	54.7	59.9	64.1	66.2	69.0	70.4	71.1	71.4	71.8	72.1	73.2	73.2	73.2	73.2	
GE 1600	47.0	54.0	57.5	62.7	66.9	69.0	71.8	73.2	73.9	74.2	74.6	74.9	76.0	76.0	76.0	76.0	
GE 1400	49.8	53.5	63.3	69.7	74.6	77.4	81.9	85.4	86.8	88.2	89.2	89.5	90.6	90.6	90.6	90.6	
GE 1200	50.2	59.2	64.5	70.4	75.3	76.0	82.6	86.1	87.5	88.5	89.9	90.2	91.3	91.3	91.3	91.3	
GE 1000	50.5	59.6	64.8	71.1	76.1	76.1	83.6	87.1	88.5	89.9	90.9	91.3	92.3	92.3	92.3	92.3	
GE 900	51.2	60.3	65.5	71.3	76.7	79.8	84.3	87.6	89.2	90.6	91.6	92.0	93.0	93.0	93.0	93.0	
GE 800	51.2	60.6	65.9	72.1	77.0	80.1	84.7	88.2	89.5	91.3	92.3	92.7	93.7	93.7	93.7	93.7	
GE 700	51.2	60.6	65.9	72.1	77.0	80.1	84.7	88.2	89.5	91.3	92.3	92.7	93.7	93.7	93.7	93.7	
GE 600	51.2	60.6	65.9	72.1	77.0	80.1	84.7	88.2	89.5	91.3	92.3	92.7	93.7	93.7	93.7	93.7	
GE 500	51.2	60.6	65.9	72.1	77.0	80.1	84.7	88.2	89.5	91.3	92.3	92.7	93.7	93.7	93.7	93.7	
GE 400	51.2	60.6	65.9	72.1	77.0	80.1	84.7	88.2	89.5	91.3	92.3	92.7	93.7	93.7	93.7	93.7	
GE 300	51.2	60.6	65.9	72.1	77.0	80.1	84.7	88.2	89.5	91.3	92.3	92.7	93.7	93.7	93.7	93.7	
GE 200	51.2	60.6	65.9	72.1	77.0	80.1	84.7	88.2	89.5	91.3	92.3	92.7	93.7	93.7	93.7	93.7	
GE 100	51.2	60.6	65.9	72.1	77.0	80.1	84.7	88.2	89.5	91.3	92.3	92.7	93.7	93.7	93.7	93.7	
GE 0	51.2	60.6	65.9	72.1	77.0	80.1	84.7	88.2	89.5	91.3	92.3	92.7	93.7	93.7	93.7	93.7	

TOTAL NUMBER OF OBSERVATIONS: 237

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87
MONTH: JAN HOURS(LST): 0900-1100

CEILING	VISIBILITY IN HUNDREDS OF METERS															
	IN	1	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
	FEET	1	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400
NO CEIL	1	20.1	23.7	25.4	27.1	29.1	31.8	33.1	34.4	35.1	35.8	36.4	36.1	36.5	36.5	36.5
GE 200001	20.1	23.7	25.4	27.1	29.1	31.8	33.1	34.4	35.1	35.8	36.4	36.1	36.5	36.5	36.5	36.5
GE 180001	20.1	23.7	25.4	27.1	29.1	31.8	33.1	34.4	35.1	35.8	36.4	36.1	36.5	36.5	36.5	36.5
GE 160001	20.1	23.7	25.4	27.1	29.1	31.8	33.1	34.4	35.1	35.8	36.4	36.1	36.5	36.5	36.5	36.5
GE 140001	20.1	23.7	25.4	27.1	29.1	31.8	33.1	34.4	35.1	35.8	36.4	36.1	36.5	36.5	36.5	36.5
GE 120001	20.1	23.7	25.4	27.1	29.1	31.8	33.1	34.4	35.1	35.8	36.4	36.1	36.5	36.5	36.5	36.5
GE 100001	27.4	33.4	35.4	37.5	39.5	42.8	44.5	45.8	46.8	47.5	47.5	48.2	48.5	48.5	48.5	48.5
GE 900001	27.4	33.4	35.4	37.5	39.5	42.8	44.5	45.8	46.8	47.5	47.5	48.2	48.5	48.5	48.5	48.5
GE 800001	27.4	33.4	35.4	37.5	39.5	42.8	44.5	45.8	46.8	47.5	47.5	48.2	48.5	48.5	48.5	48.5
GE 700001	27.4	33.4	35.4	37.5	39.5	42.8	44.5	45.8	46.8	47.5	47.5	48.2	48.5	48.5	48.5	48.5
GE 600001	27.4	33.4	35.4	37.5	39.5	42.8	44.5	45.8	46.8	47.5	47.5	48.2	48.5	48.5	48.5	48.5
GE 500001	29.1	34.1	36.5	38.1	40.1	43.5	45.2	46.5	47.5	48.2	48.2	49.8	49.2	49.2	49.2	49.2
GE 400001	29.1	34.1	36.5	38.1	40.1	43.5	45.2	46.5	47.5	48.2	48.2	49.8	49.2	49.2	49.2	49.2
GE 300001	29.1	34.1	36.5	38.1	40.1	43.5	45.2	46.5	47.5	48.2	48.2	49.8	49.2	49.2	49.2	49.2
GE 200001	29.1	34.1	36.5	38.1	40.1	43.5	45.2	46.5	47.5	48.2	48.2	49.8	49.2	49.2	49.2	49.2
GE 100001	30.4	36.8	39.1	40.8	42.8	46.2	48.5	50.2	51.2	51.8	51.8	52.5	52.8	52.8	52.8	52.8
GE 200001	40.8	49.8	52.4	55.5	58.5	62.9	65.6	67.9	69.2	69.9	70.7	71.2	71.9	71.9	71.9	71.9
GE 200001	41.8	50.8	53.4	56.5	59.5	64.2	66.9	69.2	70.6	71.2	71.6	72.9	73.2	73.2	73.2	73.2
GE 180001	40.8	49.8	52.4	55.5	58.5	62.9	65.6	67.9	70.6	72.2	72.2	73.6	73.6	74.2	74.2	74.2
GE 160001	40.8	49.8	52.4	55.5	58.5	62.9	65.6	67.9	70.6	72.2	72.2	73.6	73.6	74.2	74.2	74.2
GE 140001	45.6	53.2	56.2	58.2	61.5	65.9	68.6	71.2	72.6	73.2	73.2	74.6	74.6	75.3	75.3	75.3
GE 120001	45.6	53.2	56.2	58.2	61.5	65.9	68.6	71.2	72.6	73.2	73.2	74.6	74.6	75.3	75.3	75.3
GE 100001	45.6	53.2	56.2	58.2	61.5	65.9	68.6	71.2	72.6	73.2	73.2	74.6	74.6	75.3		
GE 100001	45.6	53.2	56.2	58.2	61.5	65.9	68.6	71.2	72.6	73.2	73.2	74.6	74.6	75.3	93.6	93.6
GE 900001	45.6	53.2	56.2	58.2	61.5	65.9	68.6	71.2	72.6	73.2	73.2	74.6	74.6	75.3	93.6	93.6
GE 800001	46.2	53.2	56.2	58.2	61.5	65.9	68.6	71.2	72.6	73.2	73.2	74.6	74.6	75.3	93.6	93.6
GE 700001	46.2	53.2	56.2	58.2	61.5	65.9	68.6	71.2	72.6	73.2	73.2	74.6	74.6	75.3	93.6	93.6
GE 600001	46.2	53.2	56.2	58.2	61.5	65.9	68.6	71.2	72.6	73.2	73.2	74.6	74.6	75.3	93.6	93.6
GE 500001	46.8	61.9	64.5	66.9	74.2	79.3	83.3	88.6	90.6	92.3	92.3	97.6	94.6	95.7	96.0	96.0
GE 400001	46.8	61.9	64.5	66.9	74.2	79.3	83.3	88.6	90.6	92.3	92.3	97.6	94.6	95.7	96.0	96.0
GE 300001	46.8	61.9	64.5	66.9	74.2	79.3	83.3	88.6	90.6	92.3	92.3	97.6	94.6	95.7	96.0	96.0
GE 200001	46.8	61.9	64.5	66.9	74.2	79.3	83.3	88.6	90.6	92.3	92.3	97.6	94.6	95.7	96.0	96.0
GE 100001	46.8	61.9	64.5	66.9	74.2	79.3	83.3	88.6	90.6	92.3	92.3	97.6	94.6	95.7	96.0	96.0
GE 000001	46.8	61.9	64.5	66.9	74.2	79.3	83.3	88.6	90.6	92.3	92.3	97.6	94.6	95.7	96.0	96.0

TOTAL NUMBER OF OBSERVATIONS: 242

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87
MONTH: JAN HOURS(LST): 1200-1400

CELL ID	VISIBILITY IN HUNDREDS OF METERS															
	IN FEET	1	GT 100	GE 20	GE 30	GE 40	GE 50	GE 60	GE 70	GE 80	GE 90	GE 100	GE 110	GE 120	GE 130	GE 140
	FEET	1	100	20	30	40	50	60	70	80	90	100	110	120	130	140
NO CELL	13.2	16.4	18.5	19.6	22.4	26.6	29.3	29.7	31.5	32.5	32.5	32.5	33.2	33.2	33.2	33.2
GE 20000	15.4	19.2	21.7	22.7	25.5	29.7	31.5	32.9	34.6	35.7	35.7	35.7	36.4	36.4	36.4	36.4
GE 14000	15.4	19.2	21.7	22.7	25.5	29.7	31.5	32.9	34.6	35.7	35.7	35.7	36.4	36.4	36.4	36.4
GE 16000	15.4	19.2	21.7	22.7	25.5	29.7	31.5	32.9	34.6	35.7	35.7	35.7	36.4	36.4	36.4	36.4
GE 14000	15.4	19.2	21.7	22.7	25.5	29.7	31.5	32.9	34.6	35.7	35.7	35.7	36.4	36.4	36.4	36.4
GE 12000	15.4	19.2	21.7	22.7	25.5	29.7	31.5	32.9	34.6	35.7	35.7	35.7	36.4	36.4	36.4	36.4
GE 10000	23.8	29.4	32.4	35.3	39.2	43.4	45.8	48.6	50.3	51.4	51.4	51.7	52.4	52.4	52.4	52.4
GE 9000	23.8	29.4	32.4	35.3	39.2	43.4	45.8	48.6	50.3	51.4	51.4	51.7	52.4	52.4	52.4	52.4
GE 8000	23.8	29.4	32.4	35.3	39.2	43.4	45.8	48.6	50.3	51.4	51.4	51.7	52.4	52.4	52.4	52.4
GE 7000	23.8	29.4	32.4	35.3	39.2	43.4	45.8	48.6	50.3	51.4	51.4	51.7	52.4	52.4	52.4	52.4
GE 6000	23.8	29.4	32.4	35.3	39.2	43.4	45.8	48.6	50.3	51.4	51.4	51.7	52.4	52.4	52.4	52.4
GE 5000	23.8	29.4	32.4	35.3	39.2	43.4	45.8	48.6	50.3	51.4	51.4	51.7	52.4	52.4	52.4	52.4
GE 4000	24.1	29.4	32.4	35.3	39.2	43.4	45.8	48.6	50.3	51.4	51.4	51.7	52.4	52.4	52.4	52.4
GE 3000	24.1	32.4	35.3	37.4	40.2	44.4	46.9	49.7	51.4	52.8	53.1	53.8	53.8	53.8	53.8	53.8
GE 3000	25.9	31.0	35.0	37.4	41.3	45.5	47.9	50.7	52.4	53.8	54.9	54.9	54.9	54.9	54.9	54.9
GE 3000	26.6	32.5	36.0	38.3	42.3	46.5	49.0	51.7	53.5	54.9	54.9	55.2	55.9	55.9	55.9	55.9
GE 2500	34.0	44.1	49.0	52.8	57.3	61.5	64.3	68.5	70.6	72.0	72.4	73.1	73.8	73.8	73.8	73.8
GE 2000	35.7	45.1	50.0	53.5	58.4	62.6	65.4	69.6	71.7	73.1	73.4	74.1	74.8	74.8	74.8	74.8
GE 1800	35.7	45.1	50.0	53.5	58.4	62.6	65.4	69.6	71.7	73.1	73.4	74.1	74.8	74.8	74.8	74.8
GE 1600	36.4	45.9	50.7	54.5	59.1	64.0	66.8	71.0	73.1	74.5	74.8	75.5	76.2	76.2	76.2	76.2
GE 1400	38.1	51.7	56.3	61.9	67.3	73.8	77.3	83.2	86.7	88.8	89.5	91.6	93.0	93.0	93.0	93.0
GE 1200	39.5	51.0	57.0	62.5	69.5	74.5	79.0	84.3	87.8	89.9	90.6	92.7	94.1	94.1	94.1	94.1
GE 900	38.5	51.4	57.3	62.9	69.3	74.8	78.3	84.6	88.1	90.2	90.9	93.1	94.4	94.4	94.4	94.4
GE 900	39.5	51.4	57.3	62.9	69.3	75.2	78.7	85.0	88.5	90.6	91.3	93.4	94.3	94.8	94.8	94.8
GE 700	39.5	51.7	57.7	63.3	69.2	75.5	79.0	85.3	88.8	90.9	91.6	93.7	95.1	95.1	95.1	95.1
GE 500	36.5	51.7	57.7	63.3	69.2	75.5	79.0	85.3	88.8	90.9	91.6	93.7	95.1	95.1	95.1	95.1
GE 400	38.5	51.7	57.7	63.3	69.6	75.9	79.4	85.7	89.6	92.0	92.7	94.8	96.2	96.2	96.2	96.2
GE 300	38.5	51.7	57.7	63.3	69.6	75.9	79.4	85.7	89.7	92.3	92.7	95.1	96.5	96.5	96.5	96.5
GE 200	38.5	51.7	58.0	63.6	69.9	76.2	79.7	86.0	90.2	92.7	93.4	95.5	97.6	98.6	98.6	98.6
GE 100	38.5	51.7	58.0	63.6	69.9	76.2	79.7	86.0	90.2	92.7	93.4	95.5	97.6	98.6	99.3	99.7
GE 100	38.5	51.7	58.0	63.6	69.9	76.2	79.7	86.0	90.2	92.7	93.4	95.5	97.6	98.6	99.3	100.0

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-67
MONTH: JAN HOURS(IST): 1500-1700

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 90	GE 33	GE 60	GE 46	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	10.6	19.1	20.4	22.4	24.7	27.6	29.3	31.9	32.9	33.2	37.9	34.5	34.5	34.5	34.5	34.5
GE 20000	15.5	22.4	24.0	26.3	28.6	31.6	33.2	36.2	37.5	37.8	38.5	39.5	39.5	39.5	39.5	39.5
GE 18000	15.5	22.4	24.0	26.3	28.6	31.6	33.2	36.2	37.5	37.8	38.5	39.5	39.5	39.5	39.5	39.5
GE 16000	15.5	22.4	24.0	26.3	28.6	31.6	33.2	36.2	37.5	37.8	38.5	39.5	39.5	39.5	39.5	39.5
GE 14000	15.5	22.4	24.0	26.3	28.6	31.6	33.2	36.2	37.5	37.8	38.5	39.5	39.5	39.5	39.5	39.5
GE 12000	15.5	22.4	24.0	26.3	28.6	31.6	33.2	36.2	37.5	37.8	38.5	39.5	39.5	39.5	39.5	39.5
GE 10000	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 9000	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 8000	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 7000	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 6000	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 5000	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 4000	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 3000	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 2000	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 1000	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 500	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 200	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 100	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 50	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 20	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 10	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 5	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 2	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9
GE 1	22.7	30.6	32.9	38.2	41.4	45.4	47.4	51.6	53.6	54.3	54.9	55.9	55.9	55.9	55.9	55.9

TOTAL NUMBER OF OBSERVATIONS: 304

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221150 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN HOURS(LST): 1800-2000

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1 160	GE 80	GE 80	GE 60	GE 46	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	19.0	23.5	25.2	26.6	31.0	32.3	35.0	37.4	37.4	37.8	38.4	39.1	39.1	39.1	39.1	39.1
GE 20000	21.8	26.5	28.2	31.6	34.0	35.4	38.1	40.5	40.5	40.8	41.8	42.5	42.5	42.5	42.5	42.5
GE 18000	21.8	26.5	28.2	31.6	34.0	35.4	38.1	40.5	40.5	40.8	41.8	42.5	42.5	42.5	42.5	42.5
GE 16000	21.8	26.5	28.2	31.6	34.0	35.4	38.1	40.5	40.5	40.8	41.8	42.5	42.5	42.5	42.5	42.5
GE 14000	21.8	26.5	28.2	31.6	34.0	35.4	38.1	40.5	40.5	40.8	41.8	42.5	42.5	42.5	42.5	42.5
GE 12000	21.8	26.5	28.2	31.6	34.0	35.4	38.1	40.5	40.5	40.8	41.8	42.5	42.5	42.5	42.5	42.5
GE 10000	28.6	36.1	38.4	42.5	45.6	47.6	51.4	55.4	55.8	56.1	57.5	58.2	58.2	58.2	58.2	58.2
GE 9000	28.6	36.1	38.4	42.5	45.6	47.6	51.4	55.4	55.8	56.1	57.5	58.2	58.2	58.2	58.2	58.2
GE 8000	28.6	36.1	38.4	42.5	45.6	47.6	51.4	55.4	55.8	56.1	57.5	58.2	58.2	58.2	58.2	58.2
GE 7000	28.6	36.1	38.4	42.5	45.6	47.6	51.4	55.4	55.8	56.1	57.5	58.2	58.2	58.2	58.2	58.2
GE 6000	28.6	36.1	38.4	42.5	45.6	47.6	51.4	55.4	55.8	56.1	57.5	58.2	58.2	58.2	58.2	58.2
GE 5000	28.9	36.4	38.8	42.9	46.3	48.3	52.0	56.5	56.8	57.1	58.5	59.2	59.2	59.2	59.2	59.2
GE 4500	28.9	36.4	38.8	42.9	46.3	48.3	52.0	56.5	56.8	57.1	58.5	59.2	59.2	59.2	59.2	59.2
GE 4000	30.3	37.6	40.1	44.2	47.6	49.7	53.4	57.8	58.2	58.5	59.9	60.5	60.5	60.5	60.5	60.5
GE 3500	31.0	38.4	40.8	44.9	48.3	50.3	54.1	58.5	58.8	59.2	60.5	61.2	61.2	61.2	61.2	61.2
GE 3000	32.0	39.5	42.2	46.3	49.7	51.7	55.4	59.9	60.2	60.5	61.9	62.6	62.6	62.6	62.6	62.6
GE 2500	40.8	52.4	56.1	61.9	65.3	68.7	72.4	77.2	78.2	78.6	79.9	80.6	80.6	80.6	80.6	80.6
GE 2000	40.8	52.4	56.1	61.9	65.3	68.7	72.4	77.2	78.2	78.6	79.9	80.6	80.6	80.6	80.6	80.6
GE 1800	41.2	52.7	56.5	62.2	65.6	69.0	72.8	77.6	78.6	78.9	80.3	81.0	81.0	81.0	81.0	81.0
GE 1600	42.2	54.4	58.2	63.9	67.3	70.7	74.5	79.3	80.3	80.6	82.0	82.7	82.7	82.7	82.7	82.7
GE 1400	43.9	56.2	62.6	69.0	72.8	77.6	82.0	87.4	89.1	90.1	91.8	93.2	93.2	93.2	93.2	93.2
GE 1200	43.9	56.5	62.9	69.7	73.5	78.2	82.7	88.1	89.8	90.8	92.5	93.9	93.9	93.9	93.9	93.9
GE 1000	43.9	58.8	63.3	70.1	73.9	78.6	83.0	88.4	90.1	91.2	92.9	94.2	94.2	94.2	94.2	94.2
GE 900	43.9	59.2	63.6	70.4	74.1	78.9	83.3	88.8	90.5	91.5	93.2	94.6	94.6	94.6	94.6	94.6
GE 800	43.9	59.4	64.3	71.1	75.2	79.9	84.4	89.6	91.8	92.9	94.6	95.9	95.9	95.9	95.9	95.9
GE 700	43.9	59.4	64.3	71.1	75.2	79.9	84.4	90.1	92.2	93.2	94.9	96.3	96.3	96.3	96.3	96.3
GE 600	43.9	59.4	64.6	71.4	75.5	80.3	84.7	90.5	92.5	93.5	95.2	96.6	96.6	96.6	96.6	96.6
GE 500	43.9	59.9	64.6	71.4	75.9	80.6	85.0	90.8	92.9	93.9	95.6	96.9	96.9	96.9	96.9	96.9
GE 400	43.9	59.9	64.6	71.8	76.2	81.0	85.4	91.2	93.2	94.6	96.3	97.6	97.6	97.6	97.6	97.6
GE 300	43.9	59.9	64.6	71.8	76.2	81.0	85.4	91.5	93.5	94.9	96.6	98.0	98.6	99.0	99.0	99.0
GE 200	43.9	59.9	64.6	71.8	76.2	81.0	85.4	91.5	93.5	94.9	96.6	98.0	98.6	99.0	99.3	100.0
GE 100	43.9	59.9	64.6	71.8	76.2	81.0	85.4	91.5	93.5	94.9	96.6	98.0	98.6	99.0	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS: 294

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221120 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN. HOURS(IST): 2100-2300

CEILING IN FEET	GT 160	GE 90	GE 80	GE 60	GE 40	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	15.6	20.5	22.5	23.8	28.1	30.1	31.5	33.4	34.8	34.8	34.8	34.8	35.8	36.1	36.1	36.1
GE 20000	17.9	23.2	25.2	26.8	31.5	33.4	34.8	36.8	38.1	38.1	38.1	38.1	39.1	39.4	39.4	39.4
GE 18000	17.9	23.2	25.2	26.8	31.5	33.4	34.8	36.8	38.1	38.1	38.1	38.1	39.1	39.4	39.4	39.4
GE 16000	17.9	23.2	25.2	26.8	31.5	33.4	34.8	36.8	38.1	38.1	38.1	38.1	39.1	39.4	39.4	39.4
GE 14000	17.9	23.2	25.2	26.8	31.5	33.4	34.8	36.8	38.1	38.1	38.1	38.1	39.1	39.4	39.4	39.4
GE 12000	17.9	23.2	25.2	26.8	31.5	33.4	34.8	36.8	38.1	38.1	38.1	38.1	39.1	39.4	39.4	39.4
GE 10000	22.8	29.1	31.5	35.8	41.4	44.0	45.7	48.7	50.0	50.3	50.3	51.3	52.0	52.0	52.0	52.0
GE 9000	22.8	29.1	31.5	35.8	41.4	44.0	45.7	48.7	50.0	50.3	50.3	51.3	52.0	52.0	52.0	52.0
GE 8000	22.8	29.1	31.5	35.8	41.4	44.0	45.7	48.7	50.0	50.3	50.3	51.3	52.0	52.0	52.0	52.0
GE 7000	22.8	29.1	31.5	35.8	41.4	44.0	45.7	48.7	50.0	50.3	50.3	51.3	52.0	52.0	52.0	52.0
GE 6000	22.8	29.1	31.5	35.8	41.4	44.0	45.7	48.7	50.0	50.3	50.3	51.3	52.0	52.0	52.0	52.0
GE 5000	23.2	29.5	31.8	36.1	41.7	44.4	46.0	49.0	50.3	50.7	50.7	51.7	52.3	52.3	52.3	52.3
GE 4500	23.5	29.8	32.1	36.4	42.1	44.7	46.4	49.3	50.7	51.0	51.0	52.0	52.6	52.6	52.6	52.6
GE 4000	24.8	31.1	33.4	38.1	43.7	46.4	48.0	51.0	52.6	53.3	53.3	54.3	55.0	55.0	55.0	55.0
GE 3500	25.2	31.5	33.8	38.4	44.0	46.7	48.3	51.3	53.0	53.6	53.6	54.6	55.3	55.3	55.3	55.3
GE 3000	25.6	31.8	34.1	38.7	44.4	47.0	48.7	51.7	53.3	54.0	54.0	55.0	55.6	55.6	55.6	55.6
GE 2500	35.8	47.7	50.7	55.8	62.6	65.6	67.9	71.5	73.8	74.5	74.5	75.5	76.2	76.5	76.5	76.5
GE 2000	37.1	49.0	52.0	57.0	63.9	66.9	69.2	72.8	75.2	75.8	75.8	76.8	77.5	77.8	77.8	77.8
GE 1800	37.4	49.7	52.6	57.6	64.6	67.5	69.9	73.5	75.8	76.5	76.5	77.5	78.1	78.5	78.5	78.5
GE 1600	37.7	50.3	53.3	58.6	65.6	68.5	70.9	74.5	76.8	77.5	77.5	78.5	79.1	79.5	79.5	79.5
GE 1400	40.4	55.6	59.3	65.8	73.8	76.8	82.5	87.1	89.7	90.4	90.4	91.4	92.4	93.0	93.0	93.0
GE 1200	40.7	56.0	59.6	65.9	74.2	79.1	82.6	87.4	90.1	90.7	90.7	91.7	92.7	93.4	93.4	93.4
GE 1000	40.7	56.3	59.9	66.2	74.5	79.5	83.1	87.7	90.4	91.1	91.1	92.1	93.0	93.7	93.7	93.7
GE 900	40.7	56.6	60.3	66.6	74.8	79.8	83.4	88.1	90.7	91.4	91.4	92.4	93.4	94.0	94.0	94.0
GE 800	40.7	57.2	60.9	67.5	75.6	80.8	84.4	89.1	91.7	92.4	92.4	93.4	94.4	95.0	95.0	95.0
GE 600	41.1	57.6	61.3	67.9	76.2	81.1	84.8	89.4	92.1	92.7	92.7	93.7	94.7	95.4	95.4	95.4
GE 500	41.1	57.6	61.3	67.9	76.2	81.1	84.8	89.4	92.1	92.7	92.7	93.7	94.7	95.4	95.4	95.4
GE 400	41.1	57.9	61.6	68.5	76.8	81.8	85.4	90.4	93.7	94.4	94.4	95.4	96.4	97.0	97.0	97.0
GE 300	41.1	57.9	61.6	68.5	76.8	81.8	85.4	90.4	94.4	94.7	94.7	95.7	96.7	97.4	97.4	97.4
GE 200	41.1	57.9	61.6	68.5	76.8	81.8	85.4	90.4	94.4	95.0	95.0	96.0	97.7	98.7	98.7	98.7
GE 100	41.1	57.9	61.6	68.5	76.8	81.8	85.4	90.4	94.4	95.0	95.0	96.0	97.7	99.0	99.0	99.3
GE 0	41.1	57.9	61.6	68.5	76.8	81.8	85.4	90.4	94.4	95.0	95.0	96.0	97.7	99.0	99.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 202

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN FOURS (LST): ALL

CEILING IN FEET	GT 100	VISIBILITY IN HUNDREDS OF METERS															
		GE 90	GE 80	GE 70	GE 60	GE 50	GE 40	GE 30	GE 20	GE 10	GE 10	GE 10	GE 10	GE 10	GE 10	GE 10	GE 10
NO CEIL	17.2	21.4	23.6	24.8	27.7	29.9	31.7	33.4	34.1	34.6	34.4	35.4	35.8	35.8	35.8	35.8	35.8
GE 20000	19.0	23.5	25.2	27.1	30.0	32.3	34.1	35.8	36.6	37.0	37.3	37.9	38.3	38.4	38.4	38.4	38.4
GE 18000	19.0	23.5	25.2	27.1	30.0	32.3	34.1	35.8	36.6	37.0	37.3	37.9	38.3	38.4	38.4	38.4	38.4
GE 16000	19.0	23.5	25.2	27.1	30.0	32.3	34.1	35.8	36.6	37.0	37.3	37.9	38.3	38.4	38.4	38.4	38.4
GE 14000	19.0	23.5	25.2	27.1	30.0	32.3	34.1	35.8	36.6	37.0	37.3	37.9	38.3	38.4	38.4	38.4	38.4
GE 12000	19.0	23.5	25.2	27.1	30.0	32.3	34.1	35.8	36.6	37.0	37.3	37.9	38.3	38.4	38.4	38.4	38.4
GE 10000	25.9	32.1	34.4	37.9	41.4	44.2	46.6	49.4	53.4	50.9	51.3	51.9	52.4	52.4	52.4	52.5	52.5
GE 9000	25.9	32.1	34.4	37.9	41.4	44.2	46.6	49.4	50.4	50.9	51.3	51.9	52.4	52.4	52.4	52.5	52.5
GE 8000	25.9	32.1	34.4	37.9	41.4	44.2	46.6	49.4	50.4	50.9	51.3	51.9	52.4	52.4	52.4	52.5	52.5
GE 7000	26.0	32.1	34.4	37.9	41.4	44.2	46.7	49.4	50.4	50.9	51.3	52.0	52.4	52.5	52.5	52.5	52.5
GE 6000	26.1	32.2	34.5	38.0	41.5	44.3	46.8	49.5	50.5	51.0	51.4	52.1	52.5	52.6	52.6	52.6	52.6
GE 5000	26.3	32.4	34.7	38.2	41.8	44.5	47.0	49.8	50.8	51.3	51.7	52.4	52.8	52.9	52.9	52.9	52.9
GE 4000	26.5	32.7	35.0	38.5	42.0	44.8	47.3	50.1	51.0	51.5	51.9	52.6	53.1	53.1	53.1	53.2	53.2
GE 3000	27.9	34.2	36.6	40.3	43.9	46.6	49.2	52.0	53.0	53.6	54.0	54.7	55.2	55.2	55.2	55.2	55.2
GE 2000	28.5	34.8	37.2	40.8	44.5	47.2	49.8	52.7	53.7	54.3	54.6	55.3	55.8	55.8	55.8	55.9	55.9
GE 1000	29.3	35.7	38.1	41.8	45.4	48.2	50.7	53.6	54.6	55.2	55.6	56.3	56.8	56.8	56.8	56.8	56.8
GE 2000	37.9	47.9	51.2	55.9	60.2	63.7	66.5	70.0	71.7	72.4	72.8	73.6	74.3	74.4	74.4	74.4	74.4
GE 1800	38.6	48.6	51.9	56.7	61.0	64.5	67.3	70.8	72.5	73.2	73.6	74.4	75.1	75.2	75.2	75.2	75.2
GE 1600	39.0	49.2	52.6	57.3	61.7	65.3	68.1	71.6	73.2	73.9	74.4	75.2	75.8	75.9	75.9	76.0	76.0
GE 1400	40.0	50.4	53.8	58.7	63.1	66.8	69.6	73.1	74.8	75.5	76.0	76.8	77.4	77.5	77.5	77.5	77.5
GE 1200	40.9	50.8	54.2	59.1	63.5	67.2	70.0	73.5	75.2	75.9	76.4	77.1	77.7	77.8	77.8	77.8	77.8
GE 1000	41.1	56.2	60.3	64.5	68.7	72.2	75.1	81.1	86.2	88.6	89.9	90.7	91.6	92.7	93.0	93.0	93.0
GE 900	41.1	56.5	60.6	64.8	69.0	72.5	75.5	81.5	86.6	89.0	90.3	91.1	92.2	93.1	93.3	93.3	93.4
GE 800	41.4	56.9	61.0	65.2	69.4	72.9	75.8	81.9	87.0	89.4	90.7	91.5	92.6	93.5	93.7	93.7	93.8
GE 700	41.7	57.6	61.7	65.9	70.1	73.6	76.5	82.6	87.7	90.1	91.4	92.2	93.3	94.2	94.9	94.9	94.9
GE 600	41.8	57.7	61.9	66.2	70.4	73.9	76.9	83.0	88.2	90.6	91.9	92.7	93.8	94.7	95.0	95.0	95.0
GE 500	43.8	57.7	62.0	66.3	70.6	74.1	77.1	83.2	88.5	90.9	92.3	93.2	94.4	95.2	95.5	95.5	95.5
GE 400	43.8	57.8	62.1	66.4	70.7	74.2	77.2	83.3	88.6	91.0	92.4	93.3	94.5	95.3	95.6	95.6	95.6
GE 300	43.8	57.8	62.1	66.5	70.7	74.2	77.2	83.3	88.6	91.0	92.4	93.3	94.5	95.3	95.6	95.6	95.6
GE 200	43.8	57.8	62.1	66.6	70.8	74.3	77.3	83.4	88.7	91.1	92.5	93.4	94.6	95.4	95.7	95.7	95.7
GE 100	43.8	57.8	62.1	66.6	70.8	74.3	77.3	83.4	88.7	91.1	92.5	93.4	94.6	95.4	95.7	95.7	95.7
GE	43.8	57.8	62.1	66.6	70.8	74.3	77.3	83.4	88.7	91.1	92.5	93.4	94.6	95.4	95.7	95.7	95.7

TOTAL NUMBER OF OBSERVATIONS: 2355

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS(IST): 0000-0200

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN FEET		GE 100	GE 90	GE 80	GE 65	GE 48	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL		29.4	33.3	35.6	36.4	37.5	37.5	37.5	37.5	37.9	38.7	39.7	39.1	39.1	39.1	39.1	39.1
GE 20000		32.2	37.5	39.3	40.6	41.8	41.8	42.1	42.1	42.5	43.3	43.3	43.7	43.7	43.7	43.7	43.7
GE 16000		32.2	37.5	39.3	40.6	41.8	41.8	42.1	42.1	42.5	43.3	43.3	43.7	43.7	43.7	43.7	43.7
GE 14000		32.2	37.5	39.3	40.6	41.8	41.8	42.1	42.1	42.5	43.3	43.3	43.7	43.7	43.7	43.7	43.7
GE 12000		32.2	37.5	39.3	40.6	41.8	41.8	42.1	42.1	42.5	43.3	43.3	43.7	43.7	43.7	43.7	43.7
GE 10000		32.2	37.5	39.3	40.6	41.8	41.8	42.1	42.1	42.5	43.3	43.3	43.7	43.7	43.7	43.7	43.7
GE 9000		40.6	46.7	49.4	51.3	52.5	52.5	53.3	53.6	54.0	54.8	54.8	55.2	55.2	55.2	55.2	55.2
GE 8000		40.6	46.7	49.4	51.3	52.5	52.5	53.3	53.6	54.0	54.8	54.8	55.2	55.2	55.2	55.2	55.2
GE 7000		40.6	46.7	49.4	51.3	52.5	52.5	53.3	53.6	54.0	54.8	54.8	55.2	55.2	55.2	55.2	55.2
GE 6000		40.6	46.7	49.4	51.3	52.5	52.5	53.3	53.6	54.0	54.8	54.8	55.2	55.2	55.2	55.2	55.2
GE 5000		41.4	47.5	50.2	52.1	53.3	53.3	54.0	54.4	54.9	55.6	55.6	55.9	55.9	55.9	55.9	55.9
GE 4500		42.1	48.3	51.0	52.9	54.0	54.0	54.8	55.2	55.6	56.3	56.3	56.7	56.7	56.7	56.7	56.7
GE 4000		43.7	49.8	52.5	54.4	55.6	55.6	56.3	56.7	57.5	58.2	58.2	58.6	58.6	58.6	58.6	58.6
GE 3500		44.8	51.0	53.6	55.6	56.7	56.7	57.5	57.9	58.6	59.4	59.4	59.8	59.8	59.8	59.8	59.8
GE 3000		46.2	51.3	54.0	55.9	57.1	57.1	57.9	58.2	59.0	59.8	59.8	60.2	60.2	60.2	60.2	60.2
GE 2500		57.0	69.0	72.4	74.7	76.2	76.2	77.4	79.7	81.2	82.0	82.0	82.4	82.4	82.4	82.4	82.4
GE 2000		61.0	70.5	73.9	76.2	77.8	77.8	78.9	81.2	82.4	83.5	83.5	83.9	83.9	83.9	83.9	83.9
GE 1500		67.7	70.5	73.9	76.2	77.8	77.8	78.9	81.2	82.4	83.5	83.5	83.9	83.9	83.9	83.9	83.9
GE 1000		61.3	72.0	75.5	77.8	79.3	79.3	80.5	82.8	83.7	85.1	85.1	85.4	85.4	85.4	85.4	85.4
GE 500		64.4	77.0	81.8	84.7	87.1	87.0	89.3	92.0	93.1	94.6	94.6	95.0	95.4	95.4	95.4	95.4
GE 1000		64.4	77.0	80.6	84.7	87.1	87.0	89.3	92.0	93.1	94.6	94.6	95.0	95.4	95.4	95.4	95.4
GE 500		64.4	77.0	80.6	84.7	87.1	87.0	89.3	92.0	93.1	94.6	94.6	95.0	95.4	95.4	95.4	95.4
GE 1000		64.4	77.4	81.6	85.8	88.1	88.1	90.4	93.1	94.3	95.8	95.8	96.2	96.6	96.6	96.6	96.6
GE 500		64.4	77.4	81.6	85.8	88.1	88.1	90.4	93.1	94.3	95.8	95.8	96.2	96.6	96.6	96.6	96.6
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 1000		64.4	77.4	80.0	86.2	88.5	88.5	90.8	93.5	94.6	96.2	96.2	96.6	96.9	96.9	96.9	96.9
GE 500		64.4	77.4														

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS(IST): 0300-0500

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 26.0	GE 30.0	GE 35.0	GE 40.0	GE 45.0	GE 50.0	GE 55.0	GE 60.0	GE 65.0	GE 70.0	GE 75.0	GE 80.0	GE 85.0	GE 90.0	GE 95.0	GE 100.0
NO CEIL	20.4	22.6	32.6	34.7	35.7	36.1	36.8	37.9	38.3	38.6	39.6	38.6	38.6	39.0	39.0	39.0
GE 2000	28.5	32.5	35.7	37.9	39.0	39.4	40.1	41.2	41.5	41.9	41.9	41.9	41.9	42.2	42.2	42.2
GE 1800	28.5	32.5	35.7	37.9	39.0	39.4	40.1	41.2	41.5	41.9	41.9	41.9	41.9	42.2	42.2	42.2
GE 1600	28.5	32.5	35.7	37.9	39.0	39.4	40.1	41.2	41.5	41.9	41.9	41.9	41.9	42.2	42.2	42.2
GE 1400	28.5	32.5	35.7	37.9	39.0	39.4	40.1	41.2	41.5	41.9	41.9	41.9	41.9	42.2	42.2	42.2
GE 1200	28.5	32.5	35.7	37.9	39.0	39.4	40.1	41.2	41.5	41.9	41.9	41.9	41.9	42.2	42.2	42.2
GE 1000	37.5	42.6	46.6	49.1	50.5	50.9	51.6	53.1	54.2	54.9	54.9	54.9	54.9	55.2	55.2	55.2
GE 900	37.5	42.6	46.6	49.1	50.5	50.9	51.6	53.1	54.2	54.9	54.9	54.9	54.9	55.2	55.2	55.2
GE 800	37.5	42.6	46.6	49.1	50.5	50.9	51.6	53.1	54.2	54.9	54.9	54.9	54.9	55.2	55.2	55.2
GE 700	37.5	42.6	46.6	49.1	50.5	50.9	51.6	53.1	54.2	54.9	54.9	54.9	54.9	55.2	55.2	55.2
GE 600	37.5	42.6	46.6	49.1	50.5	50.9	51.6	53.1	54.2	54.9	54.9	54.9	54.9	55.2	55.2	55.2
GE 500	38.3	43.3	47.3	49.8	51.3	51.6	52.3	53.8	54.9	55.6	56.5	56.6	56.6	56.6	56.6	56.6
GE 450	39.0	44.0	48.0	50.5	52.0	52.3	53.1	54.5	55.6	56.3	56.3	56.3	56.3	56.7	56.7	56.7
GE 400	41.9	46.9	50.9	53.4	54.9	55.2	56.0	57.4	58.5	59.2	59.2	59.2	59.2	59.6	59.6	59.6
GE 350	43.0	48.0	52.0	54.5	56.0	56.3	57.0	59.5	59.6	60.3	60.3	60.3	60.3	60.6	60.6	60.6
GE 300	43.7	48.7	52.7	55.2	56.7	57.0	57.8	59.2	60.3	61.0	61.0	61.0	61.0	61.4	61.4	61.4
GE 250	56.0	64.2	69.2	72.2	73.6	75.1	75.8	77.6	78.7	79.4	79.4	79.4	79.4	79.8	79.8	79.8
GE 200	56.7	65.0	69.7	73.3	74.7	76.2	76.9	78.7	79.8	80.5	80.5	80.5	80.5	80.9	80.9	80.9
GE 180	57.9	66.1	70.8	74.4	76.2	77.6	78.3	80.1	81.2	81.9	81.9	81.9	81.9	82.3	82.3	82.3
GE 160	59.5	66.8	71.5	75.1	76.9	78.3	79.1	80.9	81.9	82.7	82.7	82.7	82.7	83.0	83.0	83.0
GE 140	61.4	72.9	79.1	82.7	85.2	86.6	87.7	89.9	91.3	92.8	92.8	92.8	92.8	93.1	93.1	93.1
GE 120	61.4	72.9	79.1	82.7	85.2	86.6	87.7	89.9	91.3	92.8	92.8	92.8	92.8	93.1	93.1	93.1
GE 100	61.7	74.4	80.5	84.1	85.6	86.1	87.2	89.2	91.3	92.8	94.2	94.2	94.2	94.6	94.6	94.6
GE 90	61.7	74.4	80.5	84.1	85.6	86.1	87.2	89.2	91.3	92.8	94.2	94.2	94.2	94.6	94.6	94.6
GE 80	61.7	75.1	81.2	84.8	87.4	88.8	89.9	92.1	93.5	94.9	94.9	94.9	94.9	95.3	95.3	95.3
GE 70	61.7	75.1	81.2	84.8	87.4	88.8	89.9	92.1	93.5	94.9	94.9	94.9	94.9	95.3	95.3	95.3
GE 60	61.7	75.1	81.2	84.8	87.4	88.8	89.9	92.1	93.5	94.9	94.9	94.9	94.9	95.3	95.3	95.3
GE 50	61.7	75.1	81.2	84.8	87.4	88.8	89.9	92.1	93.5	94.9	94.9	94.9	94.9	95.3	95.3	95.3
GE 40	61.7	75.1	81.2	84.8	87.4	88.8	89.9	92.1	93.5	94.9	94.9	94.9	94.9	95.3	95.3	95.3
GE 30	61.7	75.1	81.2	84.8	87.4	88.8	89.9	92.1	93.5	94.9	94.9	94.9	94.9	95.3	95.3	95.3
GE 20	61.7	75.1	81.2	84.8	87.4	88.8	89.9	92.1	93.5	94.9	94.9	94.9	94.9	95.3	95.3	95.3
GE 10	61.7	75.1	81.2	84.8	87.4	88.8	89.9	92.1	93.5	94.9	94.9	94.9	94.9	95.3	95.3	95.3
GE 0	61.7	75.1	81.2	84.8	87.4	88.8	89.9	92.1	93.5	94.9	94.9	94.9	94.9	95.3	95.3	95.3

TOTAL NUMBER OF OBSERVATIONS: 277

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87

MONTH: FEB

HOURS (LST): 0600-0800

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO CEIL	27.7	32.0	33.0	36.6	38.1	38.1	38.8	39.9	40.3	40.7	40.7	40.7	40.7	40.7	40.7	40.7
GE 2000	37.3	36.6	37.0	40.7	42.1	42.1	42.9	44.0	44.3	45.1	45.1	45.1	45.1	45.1	45.1	45.1
GE 1800	33.3	36.6	37.0	40.7	42.1	42.1	42.9	44.0	44.3	45.1	45.1	45.1	45.1	45.1	45.1	45.1
GE 1600	33.3	36.6	37.0	40.7	42.1	42.1	42.9	44.0	44.3	45.1	45.1	45.1	45.1	45.1	45.1	45.1
GE 1400	33.3	36.6	37.0	40.7	42.1	42.1	42.9	44.0	44.3	45.1	45.1	45.1	45.1	45.1	45.1	45.1
GE 1200	33.3	36.6	37.0	40.7	42.1	42.1	42.9	44.0	44.3	45.1	45.1	45.1	45.1	45.1	45.1	45.1
GE 1000	38.8	43.6	44.3	48.0	50.5	50.5	51.6	53.1	53.8	54.6	54.6	54.6	54.6	54.6	54.6	54.6
GE 900	38.8	43.6	44.3	48.0	50.5	50.5	51.6	53.1	53.8	54.6	54.6	54.6	54.6	54.6	54.6	54.6
GE 800	38.8	43.6	44.3	48.0	50.5	50.5	51.6	53.1	53.8	54.6	54.6	54.6	54.6	54.6	54.6	54.6
GE 700	38.8	43.6	44.3	48.0	50.5	50.5	51.6	53.1	53.8	54.6	54.6	54.6	54.6	54.6	54.6	54.6
GE 600	38.8	43.6	44.3	48.0	50.5	50.5	51.6	53.1	53.8	54.6	54.6	54.6	54.6	54.6	54.6	54.6
GE 500	38.8	44.3	45.1	48.7	51.3	51.3	52.4	53.8	54.6	55.3	55.7	55.3	55.3	55.3	55.3	55.3
GE 400	38.8	44.3	45.1	48.7	51.3	51.3	52.4	53.8	54.6	55.3	55.7	55.3	55.3	55.3	55.3	55.3
GE 300	42.9	47.6	48.4	52.4	54.9	54.9	56.0	57.5	58.2	59.0	59.0	59.0	59.0	59.0	59.0	59.0
GE 200	44.0	49.1	49.9	53.5	56.0	56.0	57.1	58.6	59.3	60.1	60.1	60.1	60.1	60.1	60.1	60.1
GE 1500	54.2	61.9	64.1	68.1	71.4	71.8	73.6	75.5	76.9	77.7	77.7	77.7	77.7	77.7	77.7	77.7
GE 1400	55.3	63.0	65.2	69.2	72.5	72.9	74.7	76.6	78.0	78.8	78.8	78.8	78.8	78.8	78.8	78.8
GE 1300	56.7	63.4	65.6	69.6	72.9	73.3	75.1	76.9	78.4	79.1	79.1	79.1	79.1	79.1	79.1	79.1
GE 1200	56.7	63.7	65.9	70.3	73.6	74.0	75.8	77.7	79.1	79.9	79.9	79.9	79.9	79.9	79.9	79.9
GE 1100	59.7	69.6	72.5	78.8	85.0	85.7	88.6	90.8	92.7	94.5	94.5	94.5	94.5	94.5	94.5	94.5
GE 1000	60.1	70.3	73.3	79.5	85.7	86.4	89.4	91.6	93.4	95.2	95.2	95.2	95.2	95.2	95.2	95.2
GE 900	60.1	70.3	73.3	79.5	85.7	86.4	89.4	91.6	93.4	95.2	95.2	95.2	95.2	95.2	95.2	95.2
GE 800	60.1	70.3	73.3	79.5	86.1	86.8	89.7	91.9	93.8	95.6	95.6	95.6	95.6	95.6	95.6	95.6
GE 700	60.4	70.7	73.6	79.9	86.8	87.5	90.5	92.7	94.5	96.3	96.3	96.3	96.3	96.3	96.3	96.3
GE 600	60.4	70.7	73.6	80.2	87.2	87.9	90.8	93.0	94.9	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 500	60.4	70.7	73.6	80.2	87.5	88.3	91.2	93.4	95.6	97.4	97.4	97.4	97.4	97.4	97.4	97.4
GE 400	60.4	70.7	73.6	80.2	87.5	88.3	91.2	93.8	96.0	97.8	97.8	97.8	97.8	97.8	97.8	97.8
GE 300	60.4	70.7	73.6	80.2	87.5	88.3	91.2	93.8	96.0	97.8	97.8	97.8	97.8	97.8	97.8	97.8
GE 200	60.4	70.7	73.6	80.2	87.5	88.3	91.2	93.8	96.0	97.8	97.8	97.8	97.8	97.8	97.8	97.8
GE 100	60.4	70.7	73.6	80.2	87.5	88.3	91.2	93.8	96.0	97.8	97.8	97.8	97.8	97.8	97.8	97.8
GE	60.4	70.7	73.6	80.2	87.5	88.3	91.2	93.8	96.0	97.8	97.8	97.8	97.8	97.8	97.8	100.0

TOTAL NUMBER OF OBSERVATIONS: 273

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 22115J STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS(IST): 0900-1100

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 1	GE 2	GE 3	GE 4	GE 5	GE 6	GE 7	GE 8	GE 9	GE 10	GE 12	GE 14	GE 16	GE 18	GE 20	GE 24
NO CEIL	20.5	23.0	25.3	27.8	30.9	32.2	33.7	34.4	34.4	34.6	34.4	34.8	34.8	34.8	34.8	34.8
GE 2000	23.1	26.4	27.8	31.1	34.4	35.9	37.7	38.5	38.5	38.8	38.8	38.8	38.8	38.8	38.8	38.8
GE 1800	23.2	26.4	27.8	31.1	34.4	35.9	37.7	38.5	38.5	38.8	38.8	38.8	38.8	38.8	38.8	38.8
GE 1600	23.1	26.4	27.8	31.1	34.4	35.9	37.7	38.5	38.5	38.8	38.8	38.8	38.8	38.8	38.8	38.8
GE 1400	23.1	26.4	27.8	31.1	34.4	35.9	37.7	38.5	38.5	38.8	38.8	38.8	38.8	38.8	38.8	38.8
GE 1200	23.1	26.4	27.8	31.1	34.4	35.9	37.7	38.5	38.5	38.8	38.8	38.8	38.8	38.8	38.8	38.8
GE 1000	36.3	40.7	42.1	46.2	49.8	51.6	53.8	54.9	55.3	55.7	55.7	55.7	55.7	55.7	55.7	55.7
GE 900	36.3	40.7	42.1	46.2	49.8	51.6	53.8	54.9	55.3	55.7	55.7	55.7	55.7	55.7	55.7	55.7
GE 800	36.3	40.7	42.1	46.2	49.8	51.6	53.8	54.9	55.3	55.7	55.7	55.7	55.7	55.7	55.7	55.7
GE 700	36.3	40.7	42.1	46.2	49.8	51.6	53.8	54.9	55.3	55.7	55.7	55.7	55.7	55.7	55.7	55.7
GE 600	36.3	40.7	42.1	46.2	49.8	51.6	53.8	54.9	55.3	55.7	55.7	55.7	55.7	55.7	55.7	55.7
GE 500	36.6	41.0	42.5	46.5	50.2	52.0	54.2	55.3	55.7	56.0	56.0	56.0	56.0	56.0	56.0	56.0
GE 450	36.6	41.4	42.9	46.9	50.5	52.4	54.6	55.7	56.0	56.4	56.4	56.4	56.4	56.4	56.4	56.4
GE 400	38.8	44.0	45.4	49.8	53.5	55.3	57.5	59.6	59.0	59.3	59.3	59.3	59.3	59.3	59.3	59.3
GE 350	39.6	44.7	46.2	50.5	54.2	56.0	58.2	59.3	59.7	60.1	60.1	60.1	60.1	60.1	60.1	60.1
GE 300	40.7	45.8	47.2	51.6	55.3	57.1	59.3	60.4	60.8	61.2	61.2	61.2	61.2	61.2	61.2	61.2
GE 250	50.5	57.5	59.2	65.2	70.0	73.3	76.6	77.7	78.4	78.6	78.8	78.8	78.8	78.8	78.8	78.8
GE 200	51.6	59.3	61.8	67.3	71.8	75.1	78.4	79.5	80.2	80.6	80.6	80.6	80.6	80.6	80.6	80.6
GE 150	51.6	59.3	61.8	67.3	71.8	75.1	78.4	79.5	80.2	80.6	80.6	80.6	80.6	80.6	80.6	80.6
GE 100	53.1	60.8	62.2	68.5	73.3	76.9	80.2	81.3	82.1	82.4	82.4	82.4	82.4	82.4	82.4	82.4
GE 80	56.8	67.4	68.9	75.5	80.6	84.1	87.7	92.7	94.5	95.6	95.6	95.6	95.6	95.6	95.6	95.6
GE 60	57.1	69.1	69.6	76.2	81.3	87.2	90.8	93.8	95.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 50	57.1	69.1	69.6	76.2	81.3	87.2	90.8	93.8	95.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 40	57.1	69.1	69.6	76.2	81.3	87.2	90.8	93.8	95.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 30	57.5	68.5	70.2	76.6	81.7	87.9	91.6	94.4	97.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2
GE 20	57.5	68.5	70.2	76.6	82.1	88.3	91.9	95.2	97.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5
GE 10	57.5	68.5	70.2	76.9	82.4	88.6	92.3	96.0	98.2	99.3	99.3	99.6	99.6	99.6	99.6	99.6
GE 5	57.5	68.5	70.2	76.9	82.4	88.6	92.3	96.0	98.2	99.3	99.3	99.6	99.6	99.6	99.6	99.6
GE 3	57.5	68.5	70.2	76.9	82.4	88.6	92.3	96.0	98.2	99.3	99.3	99.6	99.6	99.6	99.6	99.6
GE 2	57.5	68.5	70.2	76.9	82.4	88.6	92.3	96.0	98.2	99.3	99.3	99.6	99.6	99.6	99.6	99.6
GE 1	57.5	68.5	70.2	76.9	82.4	88.6	92.3	96.0	98.2	99.3	99.3	99.6	99.6	99.6	99.6	99.6

TOTAL NUMBER OF OBSERVATIONS: 273

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS(IST): 1200-1400

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN	GT	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
FEET	100	200	300	400	500	600	700	800	900	1000	1200	1400	1600	1800	2000	2500	3000
NO CEIL	20.4	25.1	26.2	29.7	33.2	35.5	36.6	36.9	38.0	38.0	38.4	38.4	38.4	38.4	38.4	38.4	38.4
GE 20000	25.1	31.9	31.0	36.9	40.1	42.7	44.1	44.4	45.9	45.9	46.2	46.2	46.2	46.2	46.2	46.2	46.2
GE 18000	25.1	31.9	31.0	36.9	40.1	42.7	44.1	44.4	45.9	45.9	46.2	46.2	46.2	46.2	46.2	46.2	46.2
GE 16000	25.1	31.9	31.0	36.9	40.1	42.7	44.1	44.4	45.9	45.9	46.2	46.2	46.2	46.2	46.2	46.2	46.2
GE 14000	25.1	31.9	31.0	36.9	40.1	42.7	44.1	44.4	45.9	45.9	46.2	46.2	46.2	46.2	46.2	46.2	46.2
GE 12000	25.1	31.9	31.0	36.9	40.1	42.7	44.1	44.4	45.9	45.9	46.2	46.2	46.2	46.2	46.2	46.2	46.2
GE 10000	39.8	48.4	49.5	53.8	57.7	61.3	63.4	64.2	65.9	65.9	66.3	66.7	66.7	66.7	66.7	66.7	66.7
GE 9000	39.8	48.4	49.5	53.8	57.7	61.3	63.4	64.2	65.9	65.9	66.3	66.7	66.7	66.7	66.7	66.7	66.7
GE 8000	39.8	48.4	49.5	53.8	57.7	61.3	63.4	64.2	65.9	65.9	66.3	66.7	66.7	66.7	66.7	66.7	66.7
GE 7000	39.8	48.4	49.5	53.8	57.7	61.3	63.4	64.2	65.9	65.9	66.3	66.7	66.7	66.7	66.7	66.7	66.7
GE 6000	39.8	48.4	49.5	53.8	57.7	61.3	63.4	64.2	65.9	65.9	66.3	66.7	66.7	66.7	66.7	66.7	66.7
GE 5000	40.1	48.7	49.8	54.1	59.1	61.6	63.8	64.5	66.3	66.3	66.7	67.0	67.0	67.0	67.0	67.0	67.0
GE 4500	40.1	48.7	49.8	54.1	59.1	61.6	63.8	64.5	66.3	66.3	66.7	67.0	67.0	67.0	67.0	67.0	67.0
GE 4000	41.2	49.5	50.9	55.2	59.1	62.7	64.9	65.6	67.4	67.4	67.7	68.1	68.1	68.1	68.1	68.1	68.1
GE 3500	41.6	50.2	51.3	55.6	59.5	63.1	65.2	65.9	67.7	67.7	68.1	68.5	68.5	68.5	68.5	68.5	68.5
GE 3000	41.6	50.2	51.3	55.6	59.5	63.1	65.2	65.9	67.7	67.7	68.1	68.5	68.5	68.5	68.5	68.5	68.5
GE 2500	51.6	62.3	63.1	68.8	73.8	78.1	80.3	82.4	84.9	84.9	85.7	86.3	86.4	86.4	86.7	86.7	86.7
GE 2000	51.6	62.4	63.4	69.2	74.2	78.5	80.6	82.8	85.3	85.3	85.7	86.4	86.7	86.7	87.1	87.1	87.1
GE 1800	51.6	62.4	63.4	69.2	74.2	78.5	80.6	82.8	85.3	85.3	85.7	86.4	86.7	86.7	87.1	87.1	87.1
GE 1600	52.0	62.7	63.8	69.5	74.6	78.9	81.0	83.2	85.7	85.7	86.4	86.7	87.1	87.1	87.5	87.5	87.5
GE 1400	55.9	68.1	69.5	75.3	80.3	85.3	88.2	90.3	93.5	94.6	95.7	96.1	97.1	97.1	97.5	97.5	97.5
GE 1200	56.3	69.2	70.6	76.3	81.4	86.4	89.2	91.4	94.6	95.7	96.4	97.1	98.2	98.2	98.6	98.6	98.6
GE 1000	56.3	69.2	70.6	76.3	81.4	86.4	89.2	91.4	94.6	95.7	96.4	97.1	98.2	98.2	98.6	98.6	98.6
GE 900	56.3	69.2	70.6	76.3	81.4	86.4	89.2	91.4	94.6	95.7	96.4	97.1	98.2	98.2	98.6	98.6	98.6
GE 800	56.3	69.2	70.6	76.3	81.4	86.4	89.2	91.4	94.6	95.7	96.4	97.1	98.2	98.2	98.6	98.6	98.6
GE 700	56.3	69.2	70.6	76.3	81.4	86.4	89.2	91.4	94.6	95.7	96.4	97.1	98.2	98.2	98.6	98.6	98.6
GE 600	56.3	69.2	70.6	76.3	81.4	86.4	89.2	91.4	94.6	95.7	96.4	97.1	98.2	98.2	98.6	98.6	98.6
GE 500	56.3	69.2	70.6	76.3	81.4	86.4	89.2	91.4	94.6	95.7	96.4	97.1	98.2	98.2	98.6	98.6	98.6
GE 400	56.3	69.2	70.6	76.3	81.4	86.4	89.2	91.4	94.6	95.7	96.4	97.1	98.2	98.2	98.6	98.6	98.6
GE 300	56.3	69.2	70.6	76.3	81.4	86.4	89.2	91.4	94.6	95.7	96.4	97.1	98.2	98.2	98.6	98.6	98.6
GE 200	56.3	69.2	70.6	76.3	81.4	86.4	89.2	91.4	94.6	95.7	96.4	97.1	98.2	98.2	98.6	98.6	98.6
GE 100	56.3	69.2	70.6	76.3	81.4	86.4	89.2	91.4	94.6	95.7	96.4	97.1	98.2	98.2	98.6	98.6	98.6
GE	56.3	69.2	70.6	76.3	81.4	86.4	89.2	91.4	94.6	95.7	96.4	97.1	98.2	98.2	98.6	98.6	98.6

TOTAL NUMBER OF OBSERVATIONS: 279

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87

MONTH: FEB HOURS(LST): 1500-1700

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN	FEET	GE 1	GE 2	GE 3	GE 4	GE 5	GE 6	GE 7	GE 8	GE 9	GE 10	GE 11	GE 12	GE 13	GE 14	GE 15	GE 16
		100	200	300	400	500	600	700	800	900	1000	1200	1400	1600	1800	2000	2000
NO CEIL	15.7	29.7	30.4	31.4	34.6	36.3	37.7	38.5	39.6	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9
GE 20000	29.7	34.6	35.9	37.4	40.3	41.8	43.2	44.0	45.1	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
GE 16000	29.7	34.6	35.9	37.4	40.3	41.8	43.2	44.0	45.1	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
GE 14000	29.7	34.6	35.9	37.4	40.3	41.8	43.2	44.0	45.1	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
GE 12000	29.7	34.6	35.9	37.4	40.3	41.8	43.2	44.0	45.1	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
GE 10000	46.2	52.4	53.8	56.0	59.0	61.2	63.0	64.1	65.6	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9
GE 9000	46.2	52.4	53.8	56.0	59.0	61.2	63.0	64.1	65.6	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9
GE 8000	46.2	52.4	53.8	56.0	59.0	61.2	63.0	64.1	65.6	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9
GE 7000	46.2	52.4	53.8	56.0	59.0	61.2	63.0	64.1	65.6	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9
GE 6000	46.2	52.4	53.8	56.0	59.0	61.2	63.0	64.1	65.6	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9
GE 5000	47.3	53.5	54.9	57.1	60.1	62.3	64.1	65.2	66.7	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
GE 4500	47.3	53.5	54.9	57.1	60.1	62.3	64.1	65.2	66.7	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
GE 4000	49.5	55.7	57.1	59.3	62.3	64.5	66.3	67.4	68.9	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2
GE 3500	49.5	55.7	57.1	59.3	62.3	64.5	66.3	67.4	68.9	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2
GE 3000	49.5	55.7	57.1	59.3	62.3	64.5	66.3	67.4	68.9	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2
GE 2500	60.1	68.5	70.7	73.3	76.6	79.5	82.4	84.2	85.7	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
GE 2000	60.1	68.5	70.7	73.3	76.6	79.5	82.4	84.2	85.7	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
GE 1800	60.1	68.5	70.7	73.3	76.6	79.5	82.4	84.2	85.7	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
GE 1600	60.1	68.5	70.7	73.3	76.6	79.5	82.4	84.2	85.7	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
GE 1400	60.1	68.5	70.7	73.3	76.6	79.5	82.4	84.2	85.7	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
GE 1200	60.1	68.5	70.7	73.3	76.6	79.5	82.4	84.2	85.7	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
GE 1000	64.8	74.0	77.3	82.1	85.7	88.6	92.3	94.9	97.4	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 900	64.8	74.0	77.3	82.1	85.7	88.6	92.3	94.9	97.4	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 800	64.8	74.0	77.3	82.1	85.7	88.6	92.3	94.9	97.4	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 700	64.8	74.0	77.3	82.1	85.7	88.6	92.3	94.9	97.4	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 600	64.8	74.0	77.3	82.1	85.7	88.6	92.3	94.9	97.4	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 500	64.8	74.0	77.3	82.1	85.7	88.6	92.3	94.9	97.4	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 400	64.8	74.0	77.3	82.1	85.7	88.6	92.3	94.9	97.4	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 300	64.8	74.0	77.3	82.1	85.7	88.6	92.3	94.9	97.4	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 200	64.8	74.0	77.3	82.1	85.7	88.6	92.3	94.9	97.4	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 100	64.8	74.0	77.3	82.1	85.7	88.6	92.3	94.9	97.4	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 0	64.8	74.0	77.3	82.1	85.7	88.6	92.3	94.9	97.4	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9

TOTAL NUMBER OF OBSERVATIONS: 273

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAO

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 76-87
MONTH: FEB HOURS(LST): 1800-2000

CEILING		VISIBILITY IN HUNDREDS OF METERS																
IN	FEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	160	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
NO CLIL	1	22.1	25.5	27.0	28.5	30.0	31.5	32.6	33.7	34.1	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
GE 2000	1	27.0	31.5	33.0	34.5	36.0	37.5	38.6	39.7	40.1	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4
GE 1800	1	27.0	31.5	33.0	34.5	36.0	37.5	38.6	39.7	40.1	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4
GE 1600	1	27.0	31.5	33.0	34.5	36.0	37.5	38.6	39.7	40.1	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4
GE 1400	1	27.0	31.5	33.0	34.5	36.0	37.5	38.6	39.7	40.1	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4
GE 1200	1	27.0	31.5	33.0	34.5	36.0	37.5	38.6	39.7	40.1	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4
GE 1000	1	42.7	48.3	50.9	52.8	54.7	56.9	58.4	59.9	60.3	60.7	60.7	61.0	61.0	61.0	61.0	61.0	61.0
GE 900	1	42.7	48.3	50.9	52.8	54.7	56.9	58.4	59.9	60.3	60.7	60.7	61.0	61.0	61.0	61.0	61.0	61.0
GE 800	1	42.7	48.3	50.9	52.8	54.7	56.9	58.4	59.9	60.3	60.7	60.7	61.0	61.0	61.0	61.0	61.0	61.0
GE 700	1	42.7	48.3	50.9	52.8	54.7	56.9	58.4	59.9	60.3	60.7	60.7	61.0	61.0	61.0	61.0	61.0	61.0
GE 600	1	42.7	48.3	50.9	52.8	54.7	56.9	58.4	59.9	60.3	60.7	60.7	61.0	61.0	61.0	61.0	61.0	61.0
GE 500	1	43.4	49.1	51.7	53.6	55.4	57.7	59.2	60.7	61.0	61.4	61.4	61.8	61.8	61.8	61.8	61.8	61.8
GE 400	1	44.2	49.8	52.4	54.3	56.2	58.8	60.3	61.8	62.2	62.5	62.5	62.9	62.9	62.9	62.9	62.9	62.9
GE 300	1	47.2	53.2	55.6	57.7	59.6	62.2	63.7	65.2	65.5	65.9	65.9	66.3	66.3	66.3	66.3	66.3	66.3
GE 200	1	47.2	53.2	55.6	57.7	59.6	62.2	63.7	65.2	65.5	65.9	65.9	66.3	66.3	66.3	66.3	66.3	66.3
GE 100	1	47.6	53.6	56.4	58.1	59.9	62.5	64.0	65.5	65.9	66.3	66.3	66.7	66.7	66.7	66.7	66.7	66.7
GE 200	1	58.9	67.0	70.7	71.9	74.2	77.5	79.0	80.5	82.0	82.4	83.1	83.5	83.5	83.5	83.5	83.5	83.5
GE 180	1	59.2	67.4	70.4	72.3	74.5	77.9	79.4	80.9	82.4	82.8	83.1	83.9	83.9	83.9	83.9	83.9	83.9
GE 160	1	59.2	67.4	70.4	72.3	74.5	77.9	79.4	80.9	82.4	82.8	83.1	83.9	83.9	83.9	83.9	83.9	83.9
GE 140	1	59.9	68.5	71.5	73.4	75.7	79.0	80.5	82.0	83.9	84.3	85.0	85.4	85.4	85.4	85.4	85.4	85.4
GE 120	1	63.7	74.2	77.5	80.9	83.5	86.0	90.3	92.5	95.1	96.3	97.0	97.4	98.5	98.5	98.5	98.5	98.5
GE 100	1	63.7	74.2	77.5	80.9	83.5	86.0	90.3	92.5	95.1	96.3	97.0	97.4	98.5	98.5	98.5	98.5	98.5
GE 90	1	63.7	74.2	77.5	80.9	83.5	86.0	90.3	92.5	95.1	96.3	97.0	97.4	98.5	98.5	98.5	98.5	98.5
GE 80	1	63.7	74.2	77.5	80.9	83.5	86.0	90.3	92.5	95.1	96.3	97.0	97.4	98.5	98.5	98.5	98.5	98.5
GE 70	1	63.7	74.2	77.5	80.9	83.5	86.0	90.3	92.5	95.1	96.3	97.0	97.4	98.5	98.5	98.5	98.5	98.5
GE 60	1	63.7	74.2	77.5	80.9	83.5	86.0	90.3	92.5	95.1	96.3	97.0	97.4	98.5	98.5	98.5	98.5	98.5
GE 50	1	63.7	74.2	77.5	80.9	83.5	86.0	90.3	92.5	95.1	96.3	97.0	97.4	98.5	98.5	98.5	98.5	98.5
GE 40	1	63.7	74.2	77.5	80.9	83.5	86.0	90.3	92.5	95.1	96.3	97.0	97.4	98.5	98.5	98.5	98.5	98.5
GE 30	1	63.7	74.2	77.5	80.9	83.5	86.0	90.3	92.5	95.1	96.3	97.0	97.4	98.5	98.5	98.5	98.5	98.5
GE 20	1	63.7	74.2	77.5	80.9	83.5	86.0	90.3	92.5	95.1	96.3	97.0	97.4	98.5	98.5	98.5	98.5	98.5
GE 10	1	63.7	74.2	77.5	80.9	83.5	86.0	90.3	92.5	95.1	96.3	97.0	97.4	98.5	98.5	98.5	98.5	98.5
GE 5	1	63.7	74.2	77.5	80.9	83.5	86.0	90.3	92.5	95.1	96.3	97.0	97.4	98.5	98.5	98.5	98.5	98.5
GE 1	1	63.7	74.2	77.5	80.9	83.5	86.0	90.3	92.5	95.1	96.3	97.0	97.4	98.5	98.5	98.5	98.5	98.5

TOTAL NUMBER OF OBSERVATIONS: 267

GLOBAL CLIMATOLOGY BRANCH
USAF/CLTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS(IST): 2100-2300

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 1	GE 2	GE 3	GE 4	GE 5	GE 6	GE 7	GE 8	GE 9	GE 10	GE 11	GE 12	GE 13	GE 14	GE 15	GE 16
NO CEIL	27.5	33.3	37.7	35.5	37.0	38.0	38.8	39.5	39.9	40.2	40.5	40.9	41.3	41.3	41.3	41.3
GE 2000	30.8	37.7	38.0	39.9	41.3	42.4	43.1	43.8	44.2	44.6	44.9	45.3	45.7	45.7	45.7	45.7
GE 1800	30.8	37.7	38.0	39.9	41.3	42.4	43.1	43.8	44.2	44.6	44.9	45.3	45.7	45.7	45.7	45.7
GE 1600	30.8	37.7	38.0	39.9	41.3	42.4	43.1	43.8	44.2	44.6	44.9	45.3	45.7	45.7	45.7	45.7
GE 1400	30.8	37.7	38.0	39.9	41.3	42.4	43.1	43.8	44.2	44.6	44.9	45.3	45.7	45.7	45.7	45.7
GE 1200	30.8	37.7	38.0	39.9	41.3	42.4	43.1	43.8	44.2	44.6	44.9	45.3	45.7	45.7	45.7	45.7
GE 1000	41.7	50.4	51.1	53.6	55.8	57.2	58.0	58.7	59.1	59.4	60.1	60.5	60.9	60.9	60.9	60.9
GE 900	41.7	50.4	51.1	53.6	55.8	57.2	58.0	58.7	59.1	59.4	60.1	60.5	60.9	60.9	60.9	60.9
GE 800	41.7	50.4	51.1	53.6	55.8	57.2	58.0	58.7	59.1	59.4	60.1	60.5	60.9	60.9	60.9	60.9
GE 700	41.7	50.4	51.1	53.6	55.8	57.2	58.0	58.7	59.1	59.4	60.1	60.5	60.9	60.9	60.9	60.9
GE 600	42.0	50.7	51.4	54.6	56.2	57.6	58.3	59.1	59.4	59.8	60.5	60.9	61.2	61.2	61.2	61.2
GE 500	42.4	51.1	51.9	54.3	56.5	58.0	58.7	59.4	59.9	60.1	60.9	61.2	61.6	61.6	61.6	61.6
GE 450	42.4	51.6	52.5	55.1	57.2	58.7	59.4	60.1	60.5	60.9	61.6	62.0	62.3	62.3	62.3	62.3
GE 400	45.3	54.3	55.1	57.6	59.6	61.6	62.3	63.0	63.4	63.8	64.5	64.9	65.2	65.2	65.2	65.2
GE 350	46.4	55.8	56.5	59.1	61.2	63.0	63.8	64.5	64.9	65.2	65.7	66.3	66.7	66.7	66.7	66.7
GE 300	46.4	55.8	56.5	59.1	61.2	63.0	63.8	64.5	64.9	65.2	65.7	66.3	66.7	66.7	66.7	66.7
GE 250	56.9	71.0	71.7	74.3	77.5	79.3	80.4	81.5	82.2	83.3	84.1	84.4	84.8	84.8	84.8	84.8
GE 200	59.0	72.1	72.9	75.4	78.6	80.4	81.5	82.6	83.3	84.4	85.1	85.5	85.9	85.9	85.9	85.9
GE 180	59.1	72.2	73.4	76.8	80.1	81.9	83.0	84.1	84.8	85.9	86.6	87.0	87.3	87.3	87.3	87.3
GE 160	59.8	73.5	74.6	77.9	81.2	83.0	84.1	85.1	85.9	87.0	87.7	88.4	88.4	88.4	88.4	88.4
GE 140	62.7	78.6	80.1	84.4	88.0	89.9	91.7	93.1	94.6	95.7	96.4	96.7	97.1	97.1	97.1	97.1
GE 120	62.7	78.6	80.1	84.4	88.0	89.9	91.7	93.1	94.6	95.7	96.4	96.7	97.1	97.1	97.1	97.1
GE 100	62.7	78.6	80.1	84.4	88.0	89.9	91.7	93.1	94.6	95.7	96.4	96.7	97.1	97.1	97.1	97.1
GE 90	62.7	78.6	80.1	84.4	88.0	89.9	91.7	93.1	94.6	95.7	96.4	96.7	97.1	97.1	97.1	97.1
GE 80	62.7	78.6	80.1	84.4	88.0	89.9	91.7	93.1	94.6	95.7	96.4	96.7	97.1	97.1	97.1	97.1
GE 70	62.7	78.6	80.1	84.4	88.0	89.9	91.7	93.1	94.6	95.7	96.4	96.7	97.1	97.1	97.1	97.1
GE 60	62.7	78.6	80.1	84.4	88.0	89.9	91.7	93.1	94.6	95.7	96.4	96.7	97.1	97.1	97.1	97.1
GE 50	62.7	78.6	80.1	84.4	88.0	89.9	91.7	93.1	94.6	95.7	96.4	96.7	97.1	97.1	97.1	97.1
GE 40	62.7	78.6	80.1	84.4	88.0	89.9	91.7	93.1	94.6	95.7	96.4	96.7	97.1	97.1	97.1	97.1
GE 30	62.7	78.6	80.1	84.4	88.0	89.9	91.7	93.1	94.6	95.7	96.4	96.7	97.1	97.1	97.1	97.1
GE 20	62.7	78.6	80.1	84.4	88.0	89.9	91.7	93.1	94.6	95.7	96.4	96.7	97.1	97.1	97.1	97.1
GE 10	62.7	78.6	80.1	84.4	88.0	89.9	91.7	93.1	94.6	95.7	96.4	96.7	97.1	97.1	97.1	97.1
GE	62.7	78.6	80.1	84.4	88.0	89.9	91.7	93.1	94.6	95.7	96.4	96.7	97.1	97.1	97.1	97.1

TOTAL NUMBER OF OBSERVATIONS: 276

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: FEB HOURS (LST): ALL

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 100	GE 90	GE 80	GE 60	GE 45	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	25.0	29.1	30.4	32.6	34.6	35.7	36.6	37.3	37.9	38.2	38.3	38.4	38.4	38.5	38.5	38.5
GE 20000	29.7	33.6	35.0	37.4	39.4	40.4	41.5	42.2	42.8	43.2	43.3	43.4	43.4	43.5	43.5	43.5
GE 18000	29.7	33.6	35.0	37.4	39.4	40.4	41.5	42.2	42.8	43.2	43.3	43.4	43.4	43.5	43.5	43.5
GE 16000	29.7	33.6	35.0	37.4	39.4	40.4	41.5	42.2	42.8	43.2	43.3	43.4	43.4	43.5	43.5	43.5
GE 14000	29.7	33.6	35.0	37.4	39.4	40.4	41.5	42.2	42.8	43.2	43.3	43.4	43.4	43.5	43.5	43.5
GE 12000	29.7	33.6	35.0	37.4	39.4	40.4	41.5	42.2	42.8	43.2	43.3	43.4	43.4	43.5	43.5	43.5
GE 10000	40.4	46.6	48.5	51.4	53.8	55.3	56.7	57.7	58.6	59.0	59.2	59.3	59.4	59.4	59.4	59.4
GE 9000	40.4	46.6	48.5	51.4	53.8	55.3	56.7	57.7	58.6	59.0	59.2	59.3	59.4	59.4	59.4	59.4
GE 8000	40.4	46.6	48.5	51.4	53.8	55.3	56.7	57.7	58.6	59.0	59.2	59.3	59.4	59.4	59.4	59.4
GE 7000	40.4	46.6	48.5	51.4	53.8	55.3	56.7	57.7	58.6	59.0	59.2	59.3	59.4	59.4	59.4	59.4
GE 6000	40.4	46.6	48.5	51.4	53.8	55.3	56.7	57.8	58.6	59.1	59.2	59.4	59.4	59.5	59.5	59.5
GE 5000	41.1	47.3	49.2	52.0	54.5	56.0	57.4	58.4	59.2	59.7	59.8	60.0	60.1	60.1	60.1	60.1
GE 4500	41.5	47.8	49.6	52.5	55.0	56.5	57.9	59.9	59.8	60.2	60.3	60.5	60.6	60.6	60.6	60.6
GE 4000	43.7	50.2	52.0	54.9	57.4	59.0	60.3	61.4	62.3	62.7	62.9	63.1	63.1	63.1	63.1	63.1
GE 3500	44.3	51.0	52.6	55.6	58.1	59.6	61.0	62.0	62.9	63.4	63.5	63.7	63.7	63.8	63.8	63.8
GE 3000	44.8	51.3	53.1	56.1	58.5	60.1	61.5	62.5	63.4	63.8	64.0	64.2	64.2	64.2	64.2	64.2
GE 2500	55.9	65.1	67.0	71.0	74.2	76.4	78.2	79.9	81.2	81.9	82.1	82.3	82.5	82.5	82.6	82.6
GE 2000	56.6	66.1	68.4	72.1	75.2	77.4	79.2	80.9	82.2	82.9	83.2	83.3	83.5	83.5	83.6	83.6
GE 1800	57.0	66.5	68.6	72.5	75.6	77.8	79.7	81.4	82.7	83.4	83.7	83.8	84.0	84.0	84.1	84.1
GE 1600	57.9	67.5	69.6	73.6	76.7	79.0	80.8	82.5	83.9	84.5	84.8	85.0	85.1	85.2	85.2	85.2
GE 1400	61.1	72.7	75.7	80.5	84.4	87.2	89.7	92.0	94.0	95.4	95.7	95.9	96.4	96.4	96.5	96.5
GE 1200	61.3	73.0	76.0	80.8	84.7	87.5	90.1	92.4	94.4	95.7	96.1	96.3	96.7	96.8	96.8	96.8
GE 1000	61.3	73.0	76.0	80.8	84.7	87.5	90.3	92.6	94.6	95.9	96.2	96.5	96.9	97.0	97.0	97.0
GE 900	61.3	73.2	76.2	81.0	85.0	87.8	90.4	92.7	94.7	96.1	96.4	96.6	97.1	97.1	97.2	97.2
GE 800	61.4	73.4	76.6	81.5	85.5	88.4	91.0	93.3	95.4	96.7	97.0	97.2	97.7	97.7	97.8	97.8
GE 700	61.5	73.5	76.7	81.6	85.7	88.6	91.2	93.5	95.6	96.9	97.2	97.5	97.9	98.0	98.0	98.0
GE 600	61.5	73.6	76.8	81.7	85.9	88.8	91.4	93.6	95.9	97.2	97.5	97.8	98.3	98.3	98.3	98.3
GE 500	61.5	73.6	76.8	81.8	86.0	88.9	91.5	94.0	96.1	97.4	97.8	98.1	98.6	98.6	98.6	98.6
GE 400	61.5	73.6	76.8	81.8	86.1	89.0	91.6	94.1	96.2	97.6	97.9	98.2	98.7	98.7	98.8	98.8
GE 300	61.5	73.6	76.8	81.8	86.1	89.0	91.6	94.2	96.3	97.6	97.9	98.3	99.0	99.3	99.3	99.3
GE 200	61.5	73.6	76.8	81.8	86.1	89.0	91.6	94.2	96.3	97.6	97.9	98.3	99.0	99.3	99.5	99.6
GE 0	61.5	73.6	76.8	81.8	86.1	89.0	91.6	94.2	96.3	97.6	97.9	98.3	99.0	99.3	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS: 2179

GLOBAL CLIMATOLOGY BRANCH
USAF/CLTAC
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221170 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-8
MONTH: MAR HOURS(UTC): 0000-0200

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 10	GE 9	GE 8	GE 7	GE 6	GE 5	GE 4	GE 3	GE 2	GE 1	GE 0	GE 10	GE 9	GE 8	GE 7	GE 6
NO CELL	29.4	32.1	34.1	35.1	36.5	37.1	37.8	38.5	39.1	39.5	39.5	39.5	39.5	39.5	39.5	39.5
GE 2000	37.8	36.5	36.5	36.5	36.5	41.5	42.5	43.5	44.1	44.8	45.2	45.2	45.2	45.2	45.2	45.2
GE 1800	37.8	36.5	36.5	36.5	36.5	39.5	41.5	42.5	43.5	44.1	44.8	45.2	45.2	45.2	45.2	45.2
GE 1600	37.8	36.5	36.5	36.5	36.5	39.5	41.5	42.5	43.5	44.1	44.8	45.2	45.2	45.2	45.2	45.2
GE 1400	37.8	36.5	36.5	36.5	36.5	39.5	41.5	42.5	43.5	44.1	44.8	45.2	45.2	45.2	45.2	45.2
GE 1200	37.8	36.5	36.5	36.5	36.5	39.5	41.5	42.5	43.5	44.1	44.8	45.2	45.2	45.2	45.2	45.2
GE 1000	38.8	42.5	44.5	46.2	49.2	50.2	51.5	52.2	52.8	53.2	53.2	53.2	53.2	53.2	53.2	53.2
GE 900	38.8	42.5	44.5	46.2	49.2	50.2	51.5	52.2	52.8	53.2	53.2	53.2	53.2	53.2	53.2	53.2
GE 800	38.8	42.5	44.5	46.2	49.2	50.2	51.5	52.2	52.8	53.2	53.2	53.2	53.2	53.2	53.2	53.2
GE 700	38.8	42.5	44.5	46.2	49.2	50.2	51.5	52.2	52.8	53.2	53.2	53.2	53.2	53.2	53.2	53.2
GE 600	38.8	42.5	44.5	46.2	49.2	50.2	51.5	52.2	52.8	53.2	53.2	53.2	53.2	53.2	53.2	53.2
GE 500	39.1	43.1	45.5	46.8	50.2	51.2	52.5	53.2	53.8	54.2	54.2	54.2	54.2	54.2	54.2	54.2
GE 400	40.1	44.1	46.5	47.8	51.2	52.2	53.5	54.2	54.8	55.2	55.2	55.2	55.2	55.2	55.2	55.2
GE 300	40.1	46.2	48.5	49.8	53.5	54.5	55.9	56.5	57.2	57.5	57.5	57.5	57.5	57.5	57.5	57.5
GE 200	42.9	46.8	49.2	50.5	54.2	55.2	56.5	57.2	57.9	58.2	58.2	58.2	58.2	58.2	58.2	58.2
GE 100	47.8	47.8	50.2	51.5	55.2	56.2	57.5	58.2	59.9	59.2	59.2	59.2	59.2	59.2	59.2	59.2
GE 2000	57.8	58.5	61.2	63.2	67.2	68.6	70.6	71.9	72.9	73.6	73.6	73.6	73.6	73.6	73.6	73.6
GE 1800	58.9	62.9	65.6	67.6	71.6	73.6	75.6	76.7	77.9	78.6	78.6	78.6	78.6	78.6	78.6	78.6
GE 1600	57.9	65.2	67.6	69.9	73.9	75.9	78.1	79.6	80.6	81.3	81.3	81.3	81.3	81.3	81.3	81.3
GE 1400	58.9	66.6	69.2	71.2	75.3	77.3	79.5	80.9	81.9	82.6	82.6	82.6	82.6	82.6	82.6	82.6
GE 1200	60.5	70.6	72.2	73.9	78.6	80.6	82.0	83.3	84.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7
GE 1000	67.2	73.9	77.6	81.3	86.2	89.0	92.3	93.6	94.6	96.0	96.0	96.0	96.0	96.0	96.0	96.0
GE 900	67.2	73.9	77.6	81.3	86.2	89.0	92.3	93.6	94.6	96.0	96.0	96.0	96.0	96.0	96.0	96.0
GE 800	67.2	74.0	78.3	81.9	86.6	89.6	93.0	94.3	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 700	67.2	74.6	78.7	82.9	86.6	89.6	93.0	94.3	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 600	67.2	74.6	78.7	82.9	86.6	89.6	93.0	94.3	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 500	67.2	74.6	78.7	82.9	86.6	89.6	93.0	94.3	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 400	67.2	74.6	78.7	82.9	86.6	89.6	93.0	94.3	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 300	67.2	74.6	78.7	82.9	86.6	89.6	93.0	94.3	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 200	67.2	74.6	78.7	82.9	86.6	89.6	93.0	94.3	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 100	67.2	74.6	78.7	82.9	86.6	89.6	93.0	94.3	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 100	67.2	74.6	78.7	82.9	86.6	89.6	93.0	94.3	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7

TOTAL NUMBER OF OBSERVATIONS: 799

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS (LST): 0300-0500

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1 160	GE 300	GE 400	GE 500	GE 600	GE 700	GE 800	GE 900	GE 1000	GE 1200	GE 1400	GE 1600	GE 1800	GE 2000	GE 2500	GE 3000
NO CEIL	29.9	32.9	33.9	35.9	37.2	38.5	38.8	38.8	39.5	39.6	39.9	39.8	39.8	39.8	40.1	40.1
GE 2000	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 1800	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 1600	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 1400	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 1200	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 1000	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 900	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 800	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 700	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 600	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 500	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 400	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 300	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 200	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 100	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 50	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 20	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 10	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 5	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 2	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 1	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4
GE 0	30.7	33.2	34.9	36.8	38.2	39.5	39.8	40.1	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.4

TOTAL NUMBER OF OBSERVATIONS: 104

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271133 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS (LST): 0600-0800

VISIBILITY IN HUNDREDS OF METERS																
IN FEET	GE 16	GE 30	GE 60	GE 90	GE 120	GE 150	GE 180	GE 210	GE 240	GE 270	GE 300	GE 330	GE 360	GE 390	GE 420	GE 450
NO CEIL	22.6	26.9	27.2	28.9	29.6	31.2	31.9	32.2	33.6	34.6	35.9	35.9	35.9	35.9	35.9	35.9
GE 20000	27.6	27.9	28.6	30.2	30.9	32.6	33.2	33.6	34.6	35.9	36.9	37.2	37.2	37.2	37.2	37.2
GE 18000	23.6	27.9	28.6	30.2	30.9	32.6	33.2	33.6	34.6	35.9	36.9	37.2	37.2	37.2	37.2	37.2
GE 16000	23.6	27.9	28.6	30.2	30.9	32.6	33.2	33.6	34.6	35.9	36.9	37.2	37.2	37.2	37.2	37.2
GE 14000	23.6	27.9	28.6	30.2	30.9	32.6	33.2	33.6	34.6	35.9	36.9	37.2	37.2	37.2	37.2	37.2
GE 12000	23.6	27.9	28.6	30.2	30.9	32.6	33.2	33.6	34.6	35.9	36.9	37.2	37.2	37.2	37.2	37.2
GE 10000	31.2	36.9	37.5	39.5	41.9	44.2	45.2	45.5	46.5	48.2	49.2	49.5	49.5	49.5	49.5	49.5
GE 9000	31.2	36.9	37.5	39.5	41.9	44.2	45.2	45.5	46.5	48.2	49.2	49.5	49.5	49.5	49.5	49.5
GE 8000	31.2	36.9	37.5	39.5	41.9	44.2	45.2	45.5	46.5	48.2	49.2	49.5	49.5	49.5	49.5	49.5
GE 7000	31.2	36.9	37.5	39.5	41.9	44.2	45.2	45.5	46.5	48.2	49.2	49.5	49.5	49.5	49.5	49.5
GE 6000	31.2	36.9	37.5	39.5	41.9	44.2	45.2	45.5	46.5	48.2	49.2	49.5	49.5	49.5	49.5	49.5
GE 5000	31.6	37.2	38.2	40.2	42.5	44.9	45.8	46.2	47.2	48.8	49.8	50.2	50.2	50.2	50.2	50.2
GE 4000	31.6	37.2	38.2	40.2	42.5	44.9	45.8	46.2	47.2	48.8	49.8	50.2	50.2	50.2	50.2	50.2
GE 3000	33.9	39.5	40.5	42.9	45.5	47.8	48.8	49.2	50.2	51.8	52.8	53.2	53.2	53.2	53.2	53.2
GE 2000	34.6	40.2	41.2	43.5	46.2	48.5	49.5	49.8	50.8	52.5	53.5	53.8	53.8	53.8	53.8	53.8
GE 1000	36.2	42.2	43.2	45.8	48.5	50.8	51.8	52.2	53.2	54.8	55.8	56.1	56.1	56.1	56.1	56.1
GE 2500	43.9	51.8	53.5	57.5	63.5	62.8	64.5	64.8	66.1	67.8	69.8	69.1	69.1	69.1	69.1	69.1
GE 2000	46.2	54.2	55.5	59.8	62.8	65.1	66.8	67.4	68.8	70.4	71.4	71.8	71.8	71.8	71.8	71.8
GE 1800	46.2	54.2	55.8	57.5	61.5	64.5	66.8	68.4	69.1	70.4	72.1	73.1	73.4	73.4	73.4	73.4
GE 1600	50.5	63.1	62.1	66.4	69.4	72.4	74.1	74.8	76.1	77.7	79.1	79.1	79.1	79.1	79.1	79.1
GE 1400	53.8	66.1	68.8	73.8	78.1	82.7	84.7	88.0	89.7	91.4	92.7	93.7	93.7	93.7	93.7	93.7
GE 1200	53.8	66.4	69.4	74.4	79.7	83.4	85.4	88.7	90.4	92.0	93.4	93.7	93.7	93.7	93.7	93.7
GE 1000	54.2	66.8	69.8	74.8	79.1	83.7	85.7	89.7	90.7	92.4	93.7	94.0	94.0	94.0	94.0	94.0
GE 900	54.2	67.1	70.1	75.1	79.4	84.1	86.0	89.4	91.0	92.7	94.0	94.4	94.4	94.4	94.4	94.4
GE 800	54.5	67.4	70.4	75.7	80.4	85.4	87.4	90.7	92.4	94.0	95.3	95.7	95.7	95.7	95.7	95.7
GE 700	54.5	67.4	70.4	75.7	80.4	85.4	87.4	90.7	92.4	94.0	95.3	95.7	95.7	95.7	95.7	95.7
GE 600	54.5	67.4	70.4	75.7	80.4	85.4	87.4	90.7	92.4	94.0	95.3	95.7	95.7	95.7	95.7	95.7
GE 500	54.5	67.4	70.4	75.7	80.4	85.4	87.4	90.7	92.4	94.0	95.3	95.7	95.7	95.7	95.7	95.7
GE 400	54.5	67.4	70.4	75.7	80.4	85.7	87.7	91.0	92.7	94.4	95.7	96.0	96.0	96.0	96.0	96.0
GE 300	54.5	67.4	70.4	75.7	80.4	85.7	87.7	91.0	92.7	94.4	95.7	96.0	96.0	96.0	96.0	96.0
GE 200	54.5	67.4	70.4	75.7	80.4	85.7	87.7	91.0	92.7	94.4	95.7	96.0	96.0	96.0	96.0	96.0
GE 100	54.5	67.4	70.4	75.7	80.4	85.7	87.7	91.0	92.7	94.4	95.7	96.0	97.0	97.7	97.7	97.7
GE 0	54.5	67.4	70.4	75.7	80.4	85.7	87.7	91.0	92.7	94.4	95.7	96.0	97.0	98.0	98.3	100.0

TOTAL NUMBER OF OBSERVATIONS: 331

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS (LST): 0900-1100

CEILING IN FEET	1	GT 100	GE 20	GE 40	GE 60	GE 80	GE 100	GE 120	GE 140	GE 160	GE 180	GE 200	GE 220	GE 240	GE 260	GE 280	GE 300	GE 320	GE 340	GE 360	GE 380	GE 400
NO CEIL	1	18.1	21.1	21.7	23.4	25.8	29.1	37.4	32.4	33.8	35.5	36.5	36.1	36.8	36.8	36.8	36.8	37.1				
GE 20000	20.1	26.1	27.1	28.8	31.1	35.8	37.1	39.8	41.1	42.8	42.8	43.8	44.5	44.5	44.5	44.5	44.5	44.8				
GE 18000	22.1	26.1	27.1	29.8	31.1	35.3	37.1	39.8	41.1	42.8	42.8	43.8	44.5	44.5	44.5	44.5	44.5	44.8				
GE 16000	27.1	26.1	27.1	28.8	31.1	35.8	37.1	39.8	41.1	42.8	42.8	43.8	44.5	44.5	44.5	44.5	44.5	44.8				
GE 14000	27.1	26.1	27.1	28.8	31.1	35.8	37.1	39.8	41.1	42.8	42.8	43.8	44.5	44.5	44.5	44.5	44.5	44.8				
GE 12000	27.1	26.1	27.1	28.8	31.1	35.8	37.1	39.8	41.1	42.8	42.8	43.8	44.5	44.5	44.5	44.5	44.5	44.8				
GE 10000	37.1	35.8	37.1	37.1	41.8	47.2	49.2	52.5	54.2	55.9	56.9	57.2	57.9	57.9	57.9	57.9	57.9	58.2				
GE 9000	37.1	35.8	37.1	37.1	41.8	47.2	49.2	52.5	54.2	55.9	56.9	57.2	57.9	57.9	57.9	57.9	57.9	58.2				
GE 8000	37.1	35.8	37.1	37.1	41.8	47.2	49.2	52.5	54.2	55.9	56.9	57.2	57.9	57.9	57.9	57.9	57.9	58.2				
GE 7000	39.1	35.8	37.1	37.1	41.8	47.2	49.2	52.5	54.2	55.9	56.9	57.2	57.9	57.9	57.9	57.9	57.9	58.2				
GE 6000	37.1	35.8	37.1	37.1	41.8	47.2	49.2	52.5	54.2	55.9	56.9	57.2	57.9	57.9	57.9	57.9	57.9	58.2				
GE 5000	37.4	36.1	37.6	39.5	42.1	47.5	49.5	52.8	54.5	56.2	56.2	57.5	58.2	58.2	58.2	58.2	58.2	58.5				
GE 4000	37.8	36.5	37.8	37.8	42.5	47.8	49.8	53.2	55.2	56.9	56.9	58.2	58.2	58.2	58.2	58.2	58.2	58.5				
GE 3000	31.8	37.8	37.1	41.1	43.8	49.8	51.8	55.2	57.5	59.2	59.2	60.5	61.2	61.2	61.2	61.2	61.2	61.5				
GE 2000	31.8	37.8	37.1	41.1	43.8	49.8	51.8	55.2	57.5	59.2	59.2	60.5	61.2	61.2	61.2	61.2	61.2	61.5				
GE 1000	37.4	38.5	39.8	41.8	44.5	50.5	52.5	55.9	58.2	59.9	59.9	61.2	61.9	61.9	61.9	61.9	61.9	62.2				
GE 500	39.5	49.5	51.0	53.8	57.5	63.9	66.2	70.2	72.9	74.6	74.6	75.9	76.6	76.6	76.6	76.6	76.6	76.9				
GE 200	39.8	50.5	52.3	54.8	59.5	64.9	67.2	71.2	73.9	75.6	75.6	76.9	77.6	77.6	77.6	77.6	77.6	77.9				
GE 100	40.1	50.8	52.0	55.5	59.2	65.6	67.9	71.9	74.6	76.3	76.3	77.6	78.3	78.3	78.3	78.3	78.3	78.6				
GE 50	41.5	51.2	52.5	57.9	61.5	67.9	70.2	74.2	76.9	78.6	78.6	79.9	80.6	80.6	80.6	80.6	80.6	80.9				
GE 20	44.8	58.9	62.2	65.2	71.2	76.9	79.6	86.6	92.6	92.6	92.6	93.7	94.6	94.6	94.6	94.6	94.6	94.7				
GE 10	44.8	59.2	62.5	65.6	71.6	77.3	79.9	87.0	91.0	93.0	93.0	93.7	95.0	95.0	95.0	95.0	95.0	95.3				
GE 5	45.2	59.5	62.9	65.9	71.9	77.6	80.3	87.3	91.3	93.3	93.3	93.6	95.3	95.3	95.3	95.3	95.3	95.3				
GE 2	45.5	59.9	63.2	66.6	71.6	78.3	80.9	88.6	92.6	94.6	94.6	94.6	96.7	96.7	96.7	96.7	96.7	96.7				
GE 1	45.5	59.9	63.2	66.6	71.6	78.3	81.3	88.6	92.6	94.6	94.6	94.6	96.7	96.7	96.7	96.7	96.7	96.7				
GE 500	45.5	59.9	63.2	66.6	71.6	78.3	81.3	88.6	92.6	94.6	94.6	94.6	96.7	96.7	96.7	96.7	96.7	96.7				
GE 400	45.5	60.2	63.5	66.9	71.9	78.6	81.6	89.0	93.0	95.0	95.0	95.0	97.0	97.0	97.0	97.0	97.0	97.0				
GE 300	45.5	60.2	63.5	66.9	71.9	78.6	81.6	89.0	93.0	95.0	95.0	95.0	97.0	97.0	97.0	97.0	97.0	97.0				
GE 200	45.5	60.2	63.5	66.9	71.9	78.6	81.6	89.0	93.0	95.0	95.0	95.0	97.0	97.0	97.0	97.0	97.0	97.0				
GE 100	45.5	60.2	63.5	66.9	71.9	78.6	81.6	89.0	93.0	95.0	95.0	95.0	97.0	97.0	97.0	97.0	97.0	97.0				
GE 50	45.5	60.2	63.5	66.9	71.9	78.6	81.6	89.0	93.0	95.0	95.0	95.0	97.0	97.0	97.0	97.0	97.0	97.0				
GE 20	45.5	60.2	63.5	66.9	71.9	78.6	81.6	89.0	93.0	95.0	95.0	95.0	97.0	97.0	97.0	97.0	97.0	97.0				
GE 10	45.5	60.2	63.5	66.9	71.9	78.6	81.6	89.0	93.0	95.0	95.0	95.0	97.0	97.0	97.0	97.0	97.0	97.0				
GE 5	45.5	60.2	63.5	66.9	71.9	78.6	81.6	89.0	93.0	95.0	95.0	95.0	97.0	97.0	97.0	97.0	97.0	97.0				
GE 2	45.5	60.2	63.5	66.9	71.9	78.6	81.6	89.0	93.0	95.0	95.0	95.0	97.0	97.0	97.0	97.0	97.0	97.0				
GE 1	45.5	60.2	63.5	66.9	71.9	78.6	81.6	89.0	93.0	95.0	95.0	95.0	97.0	97.0	97.0	97.0	97.0	97.0				

TOTAL NUMBER OF OBSERVATIONS: 299

GLOBAL CLIMATOLOGY BRANCH
USAF/CIAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221152 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS(LST): 1200-1400

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 200	GE 300	GE 400	GE 440	GE 480	GE 520	GE 560	GE 600	GE 640	GE 680	GE 720	GE 760	GE 800	GE 840	GE 880
NO CEIL	27.2	29.7	32.1	32.1	33.4	35.2	35.8	39.2	39.9	40.6	40.6	41.0	41.0	41.0	41.0	41.0
GE 20000	29.0	35.5	37.2	39.2	40.6	43.0	44.4	48.1	49.1	49.8	49.8	50.2	50.2	50.2	50.2	50.2
GE 18000	29.0	35.5	37.2	39.2	40.6	43.0	44.4	48.1	49.1	49.8	49.8	50.2	50.2	50.2	50.2	50.2
GE 16000	29.0	35.5	37.2	39.2	40.6	43.0	44.4	48.1	49.1	49.8	49.8	50.2	50.2	50.2	50.2	50.2
GE 14000	29.0	35.5	37.2	39.2	40.6	43.0	44.4	48.1	49.1	49.8	49.8	50.2	50.2	50.2	50.2	50.2
GE 12000	29.4	35.8	37.5	37.5	41.0	43.3	44.7	48.5	49.5	50.2	50.2	50.5	50.5	50.5	50.5	50.5
GE 10000	35.8	44.0	46.1	49.1	50.9	54.6	56.0	60.1	62.5	63.1	63.1	63.5	63.5	63.5	63.5	63.5
GE 9000	35.8	44.0	46.1	49.1	50.9	54.6	56.0	60.1	62.5	63.1	63.1	63.5	63.5	63.5	63.5	63.5
GE 8000	35.8	44.0	46.1	49.1	50.9	54.6	56.0	60.1	62.5	63.1	63.1	63.5	63.5	63.5	63.5	63.5
GE 7000	35.8	44.0	46.1	49.1	50.9	54.6	56.0	60.1	62.5	63.1	63.1	63.5	63.5	63.5	63.5	63.5
GE 6000	35.8	44.0	46.1	49.1	50.9	54.6	56.0	60.1	62.5	63.1	63.1	63.5	63.5	63.5	63.5	63.5
GE 5000	36.2	44.4	46.4	49.5	51.2	54.9	56.3	60.4	62.8	63.5	63.5	63.8	63.8	63.8	63.8	63.8
GE 4500	36.2	44.4	46.4	49.5	51.2	54.9	56.3	60.4	62.8	63.5	63.5	63.8	63.8	63.8	63.8	63.8
GE 4000	37.6	46.1	48.1	51.2	52.9	56.7	58.0	62.1	64.5	65.2	65.2	65.5	65.5	65.5	65.5	65.5
GE 3500	37.6	46.1	48.1	51.2	52.9	56.7	58.0	62.1	64.5	65.2	65.2	65.5	65.5	65.5	65.5	65.5
GE 3000	37.9	46.4	48.5	51.5	53.2	57.0	58.4	62.5	64.9	65.5	65.5	65.9	65.9	65.9	65.9	65.9
GE 2500	44.7	55.3	58.0	61.3	63.8	68.6	70.0	74.7	78.5	79.5	79.5	80.9	80.9	80.9	80.9	80.9
GE 2000	45.7	56.3	59.0	62.6	64.8	69.6	71.0	75.8	79.5	80.5	80.5	81.9	81.9	81.9	81.9	81.9
GE 1800	46.8	57.7	60.4	64.2	66.2	71.0	72.4	77.1	80.9	81.9	81.9	83.3	83.3	83.3	83.3	83.3
GE 1600	47.4	59.0	61.8	65.5	67.6	72.4	73.7	78.5	82.3	83.3	83.3	84.6	84.6	84.6	84.6	84.6
GE 1400	52.6	65.5	68.5	73.0	76.5	81.9	84.3	90.1	94.2	95.6	95.6	97.3	97.3	97.3	97.3	97.6
GE 1200	52.6	65.5	68.5	73.0	76.5	81.9	84.3	90.1	94.2	95.6	95.6	97.3	97.3	97.3	97.3	97.6
GE 1000	52.6	65.5	68.5	73.0	76.5	81.9	84.3	90.1	94.2	95.6	95.6	97.3	97.3	97.3	97.3	97.6
GE 900	52.6	65.5	68.5	73.0	76.5	81.9	84.3	90.1	94.2	95.6	95.6	97.3	97.3	97.3	97.3	97.6
GE 800	52.6	65.5	68.5	73.0	76.5	81.9	84.3	90.1	94.2	95.6	95.6	97.3	97.3	97.3	97.3	97.6
GE 700	52.6	65.5	68.5	73.0	76.5	81.9	84.3	90.1	94.2	95.6	95.6	97.3	97.3	97.3	97.3	97.6
GE 600	52.6	65.5	68.5	73.0	76.5	81.9	84.3	90.1	94.2	95.6	95.6	97.3	97.3	97.3	97.3	97.6
GE 500	52.6	65.5	68.5	73.0	76.5	81.9	84.3	90.1	94.2	95.6	95.6	97.3	97.3	97.3	97.3	97.6
GE 400	52.6	65.5	68.5	73.0	76.5	81.9	84.3	90.1	94.2	95.6	95.6	97.3	97.3	97.3	97.3	97.6
GE 300	52.6	65.5	68.5	73.0	76.5	81.9	84.3	90.1	94.2	95.6	95.6	97.3	97.3	97.3	97.3	97.6
GE 200	52.6	65.5	68.5	73.0	76.5	81.9	84.3	90.1	94.2	95.6	95.6	97.3	97.3	97.3	97.3	97.6
GE 100	52.6	65.5	68.5	73.0	76.5	81.9	84.3	90.1	94.2	95.6	95.6	97.3	97.3	97.3	97.3	97.6
GE 0	52.6	65.5	68.5	73.0	76.5	81.9	84.3	90.1	94.2	95.6	95.6	97.3	97.3	97.3	97.3	97.6

TOTAL NUMBER OF OBSERVATIONS: 293

GLOBAL CLIMATOLOGY BRANCH
USAF/ATC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221132 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS (LST): 1500-1700

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 100	GE 90	GE 80	GE 70	GE 60	GE 50	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 9	GE 5	GE 4
NO CEIL	31.8	36.1	36.4	37.1	39.4	40.1	40.4	40.7	40.7	41.1	41.1	41.4	41.4	41.7	41.7	41.7
GE 20000	32.4	45.0	45.4	46.0	49.3	50.3	50.7	51.0	51.0	51.3	51.3	51.7	51.7	51.7	52.0	52.0
GE 18000	32.4	45.0	45.4	46.0	49.3	50.3	50.7	51.0	51.0	51.3	51.3	51.7	51.7	51.7	52.0	52.0
GE 16000	32.4	45.0	45.4	46.0	49.3	50.3	50.7	51.0	51.0	51.3	51.3	51.7	51.7	51.7	52.0	52.0
GE 14000	32.4	45.0	45.4	46.0	49.3	50.3	50.7	51.0	51.0	51.3	51.3	51.7	51.7	51.7	52.0	52.0
GE 12000	32.4	45.0	45.4	46.0	49.3	50.3	50.7	51.0	51.0	51.3	51.3	51.7	51.7	51.7	52.0	52.0
GE 10000	46.7	53.6	55.0	56.0	59.6	61.9	62.6	64.6	64.9	65.6	65.6	65.9	65.9	66.2	66.2	66.2
GE 9000	46.7	53.6	55.0	56.0	59.6	61.9	62.6	64.6	64.9	65.6	65.6	65.9	65.9	66.2	66.2	66.2
GE 8000	46.7	53.6	55.0	56.0	59.6	61.9	62.6	64.6	64.9	65.6	65.6	65.9	65.9	66.2	66.2	66.2
GE 7000	46.7	53.6	55.0	56.0	59.6	61.9	62.6	64.6	64.9	65.6	65.6	65.9	65.9	66.2	66.2	66.2
GE 6000	46.7	53.6	55.0	56.0	59.6	61.9	62.6	64.6	64.9	65.6	65.6	65.9	65.9	66.2	66.2	66.2
GE 5000	47.0	54.0	55.3	56.3	59.9	62.3	62.9	64.9	65.2	65.9	65.9	66.2	66.2	66.6	66.6	66.6
GE 4500	47.0	54.0	55.3	56.3	59.9	62.3	62.9	64.9	65.2	65.9	65.9	66.2	66.2	66.6	66.6	66.6
GE 4000	47.4	54.3	55.6	56.6	59.3	62.6	63.2	65.2	65.6	66.2	66.2	66.6	66.6	66.9	66.9	66.9
GE 3500	47.7	54.6	56.0	57.0	59.6	62.9	63.6	65.6	65.9	66.6	66.6	66.9	66.9	67.2	67.2	67.2
GE 3000	49.0	56.3	57.6	58.6	61.3	64.6	65.2	67.2	67.5	68.2	68.2	68.5	68.5	68.9	68.9	68.9
GE 2500	59.6	70.2	72.2	74.5	77.8	81.1	82.5	84.4	84.8	85.4	85.4	85.8	85.8	86.1	86.1	86.1
GE 2000	61.9	73.2	75.2	77.5	80.8	84.4	85.9	87.7	88.1	88.7	88.7	89.1	89.1	89.4	89.4	89.4
GE 1800	62.6	74.2	76.2	78.5	81.8	85.4	86.8	88.7	89.1	89.7	89.7	90.1	90.1	90.4	90.4	90.4
GE 1600	62.6	75.2	77.2	79.5	82.8	86.4	87.7	89.7	90.1	90.7	90.7	91.1	91.1	91.4	91.4	91.4
GE 1400	67.9	77.2	79.4	82.1	86.1	90.1	91.4	94.4	95.4	97.4	97.7	98.3	98.3	98.7	98.7	99.0
GE 1200	69.2	77.5	80.1	82.5	86.4	90.4	91.7	94.7	95.7	97.7	97.7	98.0	98.7	98.7	99.0	99.3
GE 1000	69.2	77.5	80.1	82.5	86.4	90.4	91.7	94.7	95.7	97.7	97.7	98.0	98.7	98.7	99.0	99.3
GE 900	69.2	77.5	80.1	82.5	86.4	90.4	91.7	94.7	95.7	97.7	97.7	98.0	98.7	98.7	99.0	99.3
GE 800	69.2	77.8	80.5	82.8	86.8	90.7	92.1	95.0	96.0	98.0	98.0	98.3	98.7	99.3	99.3	99.7
GE 700	69.2	77.8	80.5	82.8	86.8	90.7	92.1	95.0	96.0	98.0	98.0	98.3	98.7	99.3	99.3	99.7
GE 600	69.2	77.8	80.5	82.8	86.8	90.7	92.1	95.0	96.0	98.0	98.0	98.3	98.7	99.3	99.3	99.7
GE 500	69.2	77.8	80.5	82.8	86.8	90.7	92.1	95.0	96.0	98.0	98.0	98.3	98.7	99.3	99.3	99.7
GE 400	69.6	78.1	80.9	83.1	87.1	91.1	92.4	95.4	96.4	98.3	98.3	98.7	99.3	99.3	99.7	100.0
GE 300	69.6	78.1	80.9	83.1	87.1	91.1	92.4	95.4	96.4	98.3	98.3	98.7	99.3	99.3	99.7	100.0
GE 200	69.6	78.1	80.9	83.1	87.1	91.1	92.4	95.4	96.4	98.3	98.3	98.7	99.3	99.3	99.7	100.0
GE 100	69.6	78.1	80.9	83.1	87.1	91.1	92.4	95.4	96.4	98.3	98.3	98.7	99.3	99.3	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS: 732

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221127 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS(LST): 1800-2000

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN	FEET	1	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
		1	100	200	300	400	500	600	700	800	900	1000	1200	1400	1600	1800	2000
NO CEIL	1	31.4	35.5	36.5	36.5	37.1	37.1	37.5	37.5	37.8	37.8	37.9	37.8	38.1	38.1	38.1	38.1
GE 2000	1	34.1	42.1	43.1	43.1	43.8	44.1	44.5	44.5	44.8	44.8	44.9	44.8	45.2	45.2	45.2	45.2
GE 1800	1	34.1	42.1	43.1	43.1	43.8	44.1	44.5	44.5	44.8	44.8	44.8	44.8	45.2	45.2	45.2	45.2
GE 1600	1	34.1	42.1	43.1	43.1	43.8	44.1	44.5	44.5	44.8	44.8	44.8	44.8	45.2	45.2	45.2	45.2
GE 1400	1	34.1	42.1	43.1	43.1	43.8	44.1	44.5	44.5	44.8	44.8	44.8	44.8	45.2	45.2	45.2	45.2
GE 1200	1	34.1	42.1	43.1	43.1	43.8	44.1	44.5	44.5	44.8	44.8	44.8	44.8	45.2	45.2	45.2	45.2
GE 1000	1	52.2	58.2	59.9	60.9	62.2	63.2	63.9	64.2	65.2	65.2	65.2	65.2	65.6	65.6	65.6	65.6
GE 900	1	52.2	58.2	59.9	60.9	62.2	63.2	63.9	64.2	65.2	65.2	65.2	65.2	65.6	65.6	65.6	65.6
GE 800	1	52.2	58.2	59.9	60.9	62.2	63.2	63.9	64.2	65.2	65.2	65.2	65.2	65.6	65.6	65.6	65.6
GE 700	1	52.2	58.2	59.9	60.9	62.2	63.2	63.9	64.2	65.2	65.2	65.2	65.2	65.6	65.6	65.6	65.6
GE 600	1	52.2	58.2	59.9	60.9	62.2	63.2	63.9	64.2	65.2	65.2	65.2	65.2	65.6	65.6	65.6	65.6
GE 500	1	62.5	68.5	69.2	69.2	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
GE 450	1	62.5	68.5	69.2	69.2	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
GE 400	1	62.5	68.5	69.2	69.2	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
GE 350	1	62.5	68.5	69.2	69.2	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
GE 300	1	62.5	68.5	69.2	69.2	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
GE 250	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 200	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 150	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 100	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 50	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 0	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 1000	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 900	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 800	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 700	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 600	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 500	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 450	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 400	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 350	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 300	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 250	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 200	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 150	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 100	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 50	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6
GE 0	1	67.9	71.2	72.5	74.9	77.3	79.3	80.6	81.9	83.3	83.3	83.3	83.3	83.6	83.6	83.6	83.6

TOTAL NUMBER OF OBSERVATIONS: 299

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221132 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS(IST): 2100-2300

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 90	GE 40	GE 60	GE 48	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	70.7	34.7	30.6	37.6	33.9	39.9	40.9	41.3	41.3	41.6	41.6	41.6	41.6	41.6	41.6	41.6
GE 20000	35.0	39.9	41.9	42.9	44.2	45.5	46.5	46.9	46.9	47.2	47.2	47.2	47.2	47.2	47.2	47.2
GE 16000	35.0	39.9	41.9	42.9	44.2	45.5	46.5	46.9	46.9	47.2	47.2	47.2	47.2	47.2	47.2	47.2
GE 12000	35.0	39.9	41.9	42.9	44.2	45.5	46.5	46.9	46.9	47.2	47.2	47.2	47.2	47.2	47.2	47.2
GE 10000	35.0	39.9	41.9	42.9	44.2	45.5	46.5	46.9	46.9	47.2	47.2	47.2	47.2	47.2	47.2	47.2
GE 8000	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 7000	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 6000	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 5000	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 4000	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 3000	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 2000	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 1800	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 1600	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 1400	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 1200	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 1000	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 900	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 800	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 700	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 600	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 500	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 400	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 300	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 200	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 100	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 0	43.2	50.8	53.8	56.1	57.8	59.7	61.1	61.4	61.4	61.7	61.7	61.7	61.7	61.7	61.7	61.7

TOTAL NUMBER OF OBSERVATIONS: 333

GLOBAL CLIMATOLOGY BRANCH
USAF/CLTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221133 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR HOURS(UTC): ALL

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO CEIL	27.1	31.0	32.1	33.3	34.6	36.0	36.7	37.6	38.2	38.8	39.2	39.1	39.3	39.3	39.3	39.4
GE 20000	31.4	35.8	37.1	38.4	39.8	41.7	42.5	43.5	44.1	44.8	44.9	45.1	45.3	45.3	45.3	45.4
GE 18000	31.4	35.8	37.1	38.4	39.8	41.7	42.5	43.5	44.1	44.8	44.9	45.1	45.3	45.3	45.3	45.4
GE 16000	31.4	35.8	37.1	38.4	39.8	41.7	42.5	43.5	44.1	44.8	44.9	45.1	45.3	45.3	45.3	45.4
GE 14000	31.4	35.8	37.1	38.4	39.8	41.7	42.5	43.5	44.1	44.8	44.9	45.1	45.3	45.3	45.3	45.4
GE 12000	31.4	35.8	37.1	38.4	39.8	41.7	42.5	43.5	44.1	44.8	44.9	45.1	45.3	45.3	45.3	45.4
GE 10000	39.5	45.6	47.4	49.3	51.4	54.0	55.1	56.6	57.5	58.3	58.4	58.7	58.8	58.9	58.9	59.0
GE 9000	39.5	45.6	47.4	49.3	51.4	54.0	55.1	56.6	57.5	58.3	58.4	58.7	58.8	58.9	58.9	59.0
GE 8000	39.5	45.6	47.4	49.3	51.4	54.0	55.1	56.6	57.5	58.3	58.4	58.7	58.8	58.9	58.9	59.0
GE 7000	39.5	45.6	47.4	49.3	51.4	54.0	55.1	56.6	57.5	58.3	58.4	58.7	58.8	58.9	58.9	59.0
GE 6000	39.5	45.6	47.4	49.3	51.4	54.0	55.1	56.6	57.5	58.3	58.4	58.7	58.8	58.9	58.9	59.0
GE 5000	39.8	45.9	47.7	49.6	51.8	54.4	55.5	57.0	57.9	58.7	58.8	59.1	59.2	59.3	59.3	59.3
GE 4500	40.0	46.1	48.0	49.9	52.1	54.7	55.8	57.3	58.3	59.0	59.1	59.4	59.5	59.6	59.6	59.7
GE 4000	41.3	47.8	49.6	51.6	53.8	56.5	57.6	59.1	60.1	60.9	61.3	61.4	61.7	61.8	61.9	62.0
GE 3500	41.7	48.2	50.0	52.0	54.3	57.0	58.0	59.5	60.5	61.3	61.4	61.7	61.8	61.9	61.9	62.0
GE 3000	42.9	49.5	51.3	53.3	55.6	58.3	59.4	60.9	61.9	62.7	62.8	63.1	63.2	63.3	63.3	63.3
GE 2500	51.5	60.6	62.9	65.8	68.8	71.9	73.4	75.4	76.8	77.7	77.9	78.2	78.4	78.4	78.5	78.5
GE 2000	53.3	63.6	65.7	68.1	71.2	74.4	75.9	77.9	79.4	80.2	80.4	80.8	80.9	81.0	81.0	81.0
GE 1800	54.7	64.9	67.1	69.2	72.3	75.5	77.0	79.0	80.5	81.3	81.5	81.9	82.0	82.1	82.1	82.2
GE 1600	55.5	66.0	68.3	71.3	74.4	77.7	79.2	81.3	82.8	83.6	83.8	84.1	84.3	84.3	84.4	84.4
GE 1400	59.2	70.6	73.5	77.5	81.8	85.8	88.0	91.6	93.5	94.8	95.1	95.7	96.0	96.1	96.2	96.3
GE 1200	59.2	71.0	74.0	78.1	82.3	86.3	88.5	92.1	94.1	95.4	95.7	96.2	96.5	96.6	96.7	96.8
GE 1000	59.5	71.2	74.2	78.4	82.6	86.6	88.9	92.5	94.4	95.7	96.0	96.5	96.9	97.0	97.0	97.2
GE 900	59.5	71.4	74.4	78.6	82.8	86.8	89.1	92.7	94.6	95.9	96.2	96.8	97.1	97.2	97.3	97.4
GE 800	59.6	71.6	74.6	78.9	83.3	87.3	89.6	93.2	95.1	96.4	96.7	97.3	97.6	97.7	97.8	97.9
GE 700	59.6	71.6	74.6	78.9	83.3	87.4	89.8	93.4	95.3	96.6	96.9	97.5	97.8	97.9	98.0	98.1
GE 600	59.6	71.6	74.6	78.9	83.3	87.4	89.8	93.4	95.3	96.6	96.9	97.5	97.8	97.9	98.0	98.1
GE 500	59.6	71.6	74.6	78.9	83.3	87.4	89.8	93.4	95.3	96.6	96.9	97.5	97.8	97.9	98.0	98.1
GE 400	59.6	71.6	74.6	78.9	83.3	87.4	89.8	93.4	95.3	96.6	96.9	97.5	97.8	97.9	98.0	98.1
GE 300	59.6	71.6	74.6	78.9	83.3	87.4	89.8	93.4	95.3	96.6	96.9	97.5	97.8	97.9	98.0	98.1
GE 200	59.6	71.6	74.6	78.9	83.3	87.4	89.8	93.4	95.3	96.6	96.9	97.5	97.8	97.9	98.0	98.1
GE 100	59.6	71.6	74.6	78.9	83.3	87.4	89.8	93.4	95.3	96.6	96.9	97.5	97.8	97.9	98.0	98.1
GE 0	59.8	71.8	74.8	79.1	83.5	87.6	90.0	93.6	95.5	96.9	97.2	97.8	98.7	99.2	99.4	100.0

TOTAL NUMBER OF OBSERVATIONS: 2400

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VIEWS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221120 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS(IST): 0000-0200

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN	FEET	GE 1 100	GE 2 200	GE 3 300	GE 4 400	GE 5 500	GE 6 600	GE 7 700	GE 8 800	GE 9 900	GE 10 1000	GE 11 1100	GE 12 1200	GE 13 1300	GE 14 1400	GE 15 1500	GE 16 1600
NO CEIL	1	31.7	37.3	38.0	38.7	38.7	38.7	38.7	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1
GE	2000	33.5	39.1	39.8	40.5	40.5	40.5	40.5	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
GE	1600	33.5	39.1	39.8	40.5	40.5	40.5	40.5	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
GE	1400	33.5	39.1	39.8	40.5	40.5	40.5	40.5	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
GE	1200	33.5	39.1	39.8	40.5	40.5	40.5	40.5	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
GE	1000	43.0	50.4	51.8	52.8	53.2	53.2	53.2	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
GE	900	47.0	50.4	51.8	52.8	53.2	53.2	53.2	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
GE	800	47.0	50.4	51.8	52.8	53.2	53.2	53.2	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
GE	700	47.0	50.4	51.8	52.8	53.2	53.2	53.2	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
GE	600	43.0	50.4	51.8	52.8	53.2	53.2	53.2	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
GE	500	43.0	50.4	51.8	52.8	53.2	53.2	53.2	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
GE	400	44.7	52.1	53.5	54.6	54.9	54.9	54.9	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
GE	300	47.9	55.6	57.0	58.1	58.5	58.5	58.5	58.8	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2
GE	200	48.9	57.0	58.5	59.5	59.9	59.9	59.9	60.2	60.7	60.9	60.9	60.9	60.9	61.3	61.3	61.3
GE	100	50.7	59.2	60.6	61.6	62.0	62.0	62.0	62.3	63.0	63.0	63.0	63.0	63.0	63.4	63.4	63.4
GE	2500	59.9	70.8	72.0	73.9	74.3	74.6	74.6	75.7	76.8	76.8	76.8	76.8	76.8	77.1	77.1	77.1
GE	2000	61.6	72.9	74.3	76.1	76.4	76.8	76.8	77.8	79.2	79.2	79.2	79.2	79.2	79.6	79.6	79.6
GE	1800	67.7	74.3	75.7	77.5	77.8	78.2	78.2	79.2	80.6	80.6	80.6	80.6	80.6	81.0	81.0	81.0
GE	1600	64.4	75.7	77.1	78.9	79.2	79.6	79.6	80.6	82.0	82.0	82.0	82.0	82.0	82.4	82.4	82.4
GE	1400	68.7	84.9	86.6	89.4	91.5	91.9	92.6	94.4	96.5	96.8	97.2	97.2	97.2	97.5	97.5	97.5
GE	1200	64.7	84.9	86.6	89.4	91.5	91.9	92.6	94.4	96.5	96.8	97.2	97.2	97.2	97.5	97.5	97.5
GE	1000	68.7	84.9	86.6	89.4	91.5	91.9	92.6	94.4	96.5	96.8	97.2	97.2	97.2	97.5	97.5	97.5
GE	900	69.0	85.2	87.0	89.6	91.9	92.3	93.0	94.7	96.8	97.2	97.5	97.5	97.5	97.9	97.9	97.9
GE	800	69.7	86.3	88.0	90.8	93.0	93.7	94.4	96.5	98.6	98.9	99.3	99.3	99.3	99.6	99.6	99.6
GE	700	69.7	86.3	88.0	90.8	93.0	93.7	94.4	96.5	98.6	98.9	99.3	99.3	99.3	99.6	99.6	99.6
GE	600	69.7	86.3	88.0	90.8	93.0	93.7	94.4	96.5	98.6	98.9	99.3	99.3	99.3	99.6	99.6	99.6
GE	500	69.7	86.3	88.0	90.8	93.0	93.7	94.4	96.5	98.6	98.9	99.3	99.3	99.3	99.6	99.6	99.6
GE	400	69.7	86.3	88.0	90.8	93.0	93.7	94.4	96.5	98.6	98.9	99.3	99.3	99.3	99.6	99.6	99.6
GE	300	69.7	86.3	88.0	90.8	93.0	93.7	94.4	96.5	98.6	98.9	99.3	99.3	99.3	99.6	99.6	99.6
GE	200	69.7	86.3	88.0	90.8	93.0	93.7	94.4	96.5	98.6	98.9	99.3	99.3	99.3	99.6	99.6	99.6
GE	100	69.7	86.3	88.0	90.8	93.0	93.7	94.4	96.5	98.6	98.9	99.3	99.3	99.3	99.6	99.6	99.6
GE	0	69.7	86.3	88.0	90.8	93.0	93.7	94.4	96.5	98.6	98.9	99.3	99.3	99.3	99.6	99.6	99.6

TOTAL NUMBER OF OBSERVATIONS: 284

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS(LST): 0300-0500

CEILING IN FEET	1 100	VISIBILITY IN HUNDREDS OF METERS															
		GE 40	GE 60	GE 80	GE 100	GE 120	GE 140	GE 160	GE 180	GE 200	GE 240	GE 280	GE 320	GE 360	GE 400	GE 440	GE 480
NO CEIL	27.5	70.2	31.6	32.0	32.3	33.3	33.3	34.0	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4
GE 20000	29.9	32.6	34.0	34.4	34.7	35.7	35.7	36.4	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
GE 18000	29.9	32.6	34.0	34.4	34.7	35.7	35.7	36.4	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
GE 16000	29.9	32.6	34.0	34.4	34.7	35.7	35.7	36.4	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
GE 14000	29.9	32.6	34.0	34.4	34.7	35.7	35.7	36.4	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
GE 12000	29.9	32.6	34.0	34.4	34.7	35.7	35.7	36.4	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
GE 10000	39.5	42.6	44.7	45.7	46.4	48.1	48.5	49.5	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
GE 9000	39.5	42.6	44.7	45.7	46.4	48.1	48.5	49.5	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
GE 8000	39.5	42.6	44.7	45.7	46.4	48.1	48.5	49.5	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
GE 7000	39.5	42.6	44.7	45.7	46.4	48.1	48.5	49.5	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
GE 6000	39.9	43.0	45.0	46.0	46.7	48.5	48.8	49.8	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2
GE 5000	40.5	43.6	45.7	46.7	47.4	49.1	49.5	50.5	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9
GE 4500	41.2	44.7	46.7	47.8	48.5	50.2	50.5	51.5	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9
GE 4000	45.7	50.2	52.2	53.3	54.0	56.0	56.4	57.4	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7
GE 3500	46.4	51.2	53.2	54.3	55.0	57.0	57.4	58.4	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8
GE 3000	47.1	51.9	54.0	55.0	55.7	57.7	58.1	59.1	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5
GE 2500	56.4	64.9	67.4	69.1	69.8	72.5	72.9	73.9	74.2	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6
GE 2000	57.4	66.0	69.4	70.1	70.8	73.5	73.9	74.9	75.3	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6
GE 1800	59.1	68.0	70.4	72.5	72.2	75.9	76.3	77.3	77.7	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
GE 1600	59.5	68.7	71.1	73.2	73.9	76.6	77.0	78.0	78.4	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
GE 1400	59.9	76.4	81.4	84.2	86.3	89.7	91.1	92.4	93.8	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5
GE 1200	64.6	79.0	82.1	84.9	86.9	90.4	91.8	93.1	94.5	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
GE 1000	64.9	79.4	82.5	85.2	87.6	91.1	92.8	94.2	95.5	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
GE 900	65.6	80.1	83.2	85.9	88.3	91.8	93.5	94.8	96.2	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
GE 800	66.0	80.8	83.8	86.9	89.3	92.8	94.5	95.9	97.3	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
GE 700	66.0	81.1	84.2	87.3	89.7	93.1	94.8	96.2	97.6	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 600	66.0	81.1	84.2	87.3	89.7	93.1	94.8	96.2	97.6	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 500	66.0	81.1	84.2	87.3	89.7	93.1	94.8	96.2	97.6	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 400	66.0	81.1	84.2	87.3	89.7	93.1	94.8	96.2	97.6	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 300	66.0	81.1	84.2	87.3	89.7	93.1	94.8	96.2	97.6	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 200	66.0	81.1	84.2	87.3	89.7	93.1	94.8	96.2	97.6	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 100	66.0	81.1	84.2	87.3	89.7	93.1	94.8	96.2	97.6	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 0	66.0	81.1	84.2	87.3	89.7	93.1	94.8	96.2	97.6	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3

TOTAL NUMBER OF OBSERVATIONS: 291

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS (LST): 0600-0800

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS																
	1	GT	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
	100	90	80	70	60	50	40	32	24	20	16	12	10	8	5	4	0
NO CEIL	17.0	18.3	19.7	20.8	21.5	22.8	23.5	24.9	25.6	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
GE 20000	21.8	23.5	24.9	26.0	26.6	28.0	28.7	30.1	30.8	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
GE 18000	21.8	23.5	24.9	26.0	26.6	28.0	28.7	30.1	30.8	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
GE 16000	21.8	23.5	24.9	26.0	26.6	28.0	28.7	30.1	30.8	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
GE 14000	21.8	23.5	24.9	26.0	26.6	28.0	28.7	30.1	30.8	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
GE 12000	21.8	23.5	24.9	26.0	26.6	28.0	28.7	30.1	30.8	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
GE 10000	31.1	35.6	37.4	38.4	39.8	41.9	42.6	44.3	45.3	45.7	46.0	46.0	46.0	46.0	46.0	46.0	46.0
GE 9000	31.1	35.6	37.4	38.4	39.8	41.9	42.6	44.3	45.3	45.7	46.0	46.0	46.0	46.0	46.0	46.0	46.0
GE 8000	31.1	35.6	37.4	38.4	39.8	41.9	42.6	44.3	45.3	45.7	46.0	46.0	46.0	46.0	46.0	46.0	46.0
GE 7000	31.1	35.6	37.4	38.4	39.8	41.9	42.6	44.3	45.3	45.7	46.0	46.0	46.0	46.0	46.0	46.0	46.0
GE 6000	31.1	35.6	37.4	38.4	39.8	41.9	42.6	44.3	45.3	45.7	46.0	46.0	46.0	46.0	46.0	46.0	46.0
GE 5000	31.8	36.3	38.1	39.1	40.5	42.6	43.3	45.0	46.0	46.4	46.7	46.7	46.7	46.7	46.7	46.7	46.7
GE 4500	32.2	37.0	39.8	39.8	41.2	43.3	43.9	45.7	46.7	47.1	47.4	47.4	47.4	47.4	47.4	47.4	47.4
GE 4000	34.3	39.1	41.8	42.2	43.6	45.7	46.4	48.1	49.1	49.5	49.8	49.8	49.8	49.8	49.8	49.8	49.8
GE 3500	34.6	39.4	41.2	42.0	43.9	46.0	46.7	48.4	49.5	49.8	50.2	50.2	50.2	50.2	50.2	50.2	50.2
GE 3000	34.9	39.8	41.9	43.3	44.6	47.1	47.8	49.5	50.5	50.9	51.2	51.2	51.2	51.2	51.2	51.2	51.6
GE 2500	49.1	55.7	58.5	61.2	63.3	66.1	67.1	69.6	70.6	71.3	71.6	72.0	72.0	72.0	72.0	72.0	72.3
GE 2000	50.9	57.8	60.6	63.7	65.7	68.5	69.6	72.0	73.0	73.7	74.0	74.4	74.4	74.4	74.4	74.4	74.7
GE 1800	51.2	58.5	61.2	64.4	66.4	69.2	70.2	72.7	73.7	74.4	74.7	75.1	75.1	75.1	75.1	75.1	75.4
GE 1500	51.9	59.2	61.9	65.1	67.1	70.2	71.3	73.7	74.7	75.4	75.8	76.1	76.1	76.1	76.1	76.1	76.5
GE 1200	56.7	67.1	70.6	75.4	78.5	83.4	85.1	88.2	90.7	92.4	93.1	93.4	93.4	93.4	93.4	93.4	94.1
GE 1000	58.1	68.5	72.7	76.9	79.9	84.8	86.5	90.0	92.4	94.1	94.8	95.2	95.2	95.2	95.2	95.2	95.8
GE 900	58.1	68.9	72.3	77.2	80.6	85.5	87.2	90.7	93.1	94.8	95.5	95.8	95.8	95.8	95.8	95.8	96.5
GE 800	58.1	68.9	72.3	77.2	80.6	85.5	87.2	90.7	93.1	94.8	95.5	95.8	95.8	95.8	95.8	95.8	96.5
GE 700	58.1	69.2	72.7	77.5	81.0	86.2	87.9	91.7	94.1	95.8	96.5	96.9	96.9	96.9	96.9	96.9	97.6
GE 600	58.1	69.2	72.7	77.5	81.0	86.2	87.9	91.7	94.1	95.8	96.5	96.9	96.9	96.9	96.9	96.9	97.6
GE 500	58.1	69.6	73.0	77.9	81.3	86.5	88.2	92.0	94.5	96.2	96.9	97.2	97.2	97.2	97.2	97.2	97.9
GE 400	58.1	69.6	73.0	77.9	81.3	86.5	88.2	92.0	94.5	96.2	96.9	97.2	97.2	97.2	97.2	97.2	97.9
GE 300	58.1	69.6	73.0	77.9	81.3	86.5	88.2	92.0	94.5	96.2	96.9	97.2	97.2	97.2	97.2	97.2	97.9
GE 200	58.1	69.6	73.0	77.9	81.3	86.5	88.2	92.0	94.5	96.2	96.9	97.2	97.2	97.2	97.2	97.2	97.9
GE 100	58.1	69.6	73.0	77.9	81.3	86.5	88.2	92.0	94.5	96.2	96.9	97.2	97.2	97.2	97.2	97.2	97.9
GE 0	58.1	69.6	73.0	77.9	81.3	86.5	88.2	92.0	94.5	96.2	96.9	97.2	97.2	97.2	97.2	97.2	97.9

TOTAL NUMBER OF OBSERVATIONS: 209

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS(LST): 0900-1100

CEILING IN FEET	1 100	GE 90	GE 80	GE 60	GE 48	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	22.7	26.1	26.8	28.5	29.6	30.6	31.6	32.0	33.3	33.3	33.3	33.7	33.7	33.7	33.7	33.7
GE 20000	28.5	32.6	33.3	35.4	36.4	37.5	38.8	40.2	41.9	41.9	41.9	42.3	42.3	42.3	42.3	42.3
GE 18000	28.5	32.6	33.3	35.4	36.4	37.5	38.8	40.2	41.9	41.9	41.9	42.3	42.3	42.3	42.3	42.3
GE 16000	28.5	32.6	33.3	35.4	36.4	37.5	38.8	40.2	41.9	41.9	41.9	42.3	42.3	42.3	42.3	42.3
GE 14000	28.5	32.6	33.3	35.4	36.4	37.5	38.8	40.2	41.9	41.9	41.9	42.3	42.3	42.3	42.3	42.3
GE 12000	28.5	32.6	33.3	35.4	36.4	37.5	38.8	40.2	41.9	41.9	41.9	42.3	42.3	42.3	42.3	42.3
GE 10000	39.5	45.7	47.1	49.5	50.9	52.2	53.6	55.0	56.7	57.0	57.0	57.4	57.4	57.4	57.4	57.4
GE 9000	39.5	45.7	47.1	49.5	50.9	52.2	53.6	55.0	56.7	57.0	57.0	57.4	57.4	57.4	57.4	57.4
GE 8000	39.5	45.7	47.1	49.5	50.9	52.2	53.6	55.0	56.7	57.0	57.0	57.4	57.4	57.4	57.4	57.4
GE 7000	39.5	45.7	47.1	49.5	50.9	52.2	53.6	55.0	56.7	57.0	57.0	57.4	57.4	57.4	57.4	57.4
GE 6000	39.5	45.7	47.1	49.5	50.9	52.2	53.6	55.0	56.7	57.0	57.0	57.4	57.4	57.4	57.4	57.4
GE 5000	39.5	45.7	47.1	49.5	50.9	52.2	53.6	55.0	56.7	57.0	57.0	57.4	57.4	57.4	57.4	57.4
GE 4500	39.5	45.7	47.1	49.5	50.9	52.2	53.6	55.0	56.7	57.0	57.0	57.4	57.4	57.4	57.4	57.4
GE 4000	41.2	48.1	49.5	51.9	53.3	54.6	56.0	57.4	59.1	59.5	59.5	59.8	59.8	59.8	59.8	59.8
GE 3500	41.6	48.5	49.8	52.2	53.6	55.0	56.4	57.7	59.5	59.8	59.8	60.1	60.1	60.1	60.1	60.1
GE 3000	42.3	49.1	50.5	52.9	54.3	55.7	57.0	58.4	60.1	60.5	60.5	60.8	60.8	60.8	60.8	60.8
GE 2500	54.3	62.9	64.3	67.3	69.8	71.1	72.5	74.2	76.6	77.3	77.3	77.7	78.0	78.0	78.0	78.0
GE 2000	54.6	63.2	64.6	67.4	70.4	72.2	73.5	75.3	77.7	78.4	78.4	78.7	79.0	79.0	79.0	79.0
GE 1800	55.0	63.6	64.9	67.7	70.8	72.5	73.9	75.6	78.0	78.7	78.7	79.0	79.4	79.4	79.4	79.4
GE 1500	55.3	64.3	65.6	68.7	71.8	73.9	75.3	77.0	79.7	80.4	80.4	80.8	81.1	81.1	81.1	81.1
GE 1200	59.5	75.1	71.6	76.3	80.1	82.8	84.5	87.3	92.8	93.5	93.5	94.5	94.8	94.8	94.8	94.8
GE 1000	59.5	75.4	72.2	76.6	80.8	83.5	85.2	88.0	93.8	94.5	94.5	95.5	95.9	95.9	95.9	95.9
GE 900	59.8	71.1	72.9	77.3	81.4	84.2	85.9	88.7	94.5	95.5	95.5	96.6	96.9	96.9	96.9	96.9
GE 800	59.8	71.1	72.9	77.3	81.6	84.5	86.3	89.0	95.2	96.2	96.2	97.3	97.6	97.6	97.6	97.6
GE 700	60.1	71.5	73.2	77.7	82.1	84.9	86.6	89.3	95.9	96.9	96.9	97.9	98.3	98.3	98.3	98.3
GE 600	60.1	71.8	73.5	78.0	82.5	85.2	86.9	89.7	96.6	97.9	97.9	99.0	99.3	99.3	99.3	99.3
GE 500	60.1	71.8	73.5	78.0	82.5	85.2	86.9	89.7	96.6	98.3	98.3	99.3	99.7	99.7	99.7	99.7
GE 400	60.1	71.8	73.5	78.0	82.5	85.2	86.9	89.7	96.6	98.3	98.3	99.3	99.7	99.7	99.7	99.7
GE 300	60.1	71.8	73.5	78.0	82.5	85.2	86.9	89.7	96.6	98.3	98.3	99.3	99.7	99.7	99.7	99.7
GE 200	60.1	71.8	73.5	78.0	82.5	85.2	86.9	89.7	96.6	98.3	98.3	99.3	100.0	100.0	100.0	100.0
GE 100	60.1	71.8	73.5	78.0	82.5	85.2	86.9	89.7	96.6	98.3	98.3	99.3	100.0	100.0	100.0	100.0
GE 0	60.1	71.8	73.5	78.0	82.5	85.2	86.9	89.7	96.6	98.3	98.3	99.3	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 291

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87

MONTH: APR HOURS(1ST): 1200-1400

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
NO CEIL	26.4	28.2	29.6	31.0	31.0	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3
GE 20000	34.2	36.3	37.7	39.1	39.1	39.4	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8
GE 18000	34.2	36.3	37.7	39.1	39.1	39.4	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8
GE 16000	34.2	36.3	37.7	39.1	39.1	39.4	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8
GE 14000	34.2	36.3	37.7	39.1	39.1	39.4	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8
GE 12000	34.2	36.3	37.7	39.1	39.1	39.4	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8
GE 10000	45.1	48.9	50.4	51.8	51.8	52.8	53.5	54.2	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
GE 9000	45.1	48.9	50.4	51.8	51.8	52.8	53.5	54.2	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
GE 8000	45.1	48.9	50.4	51.8	51.8	52.8	53.5	54.2	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
GE 7000	45.1	48.9	50.4	51.8	51.8	52.8	53.5	54.2	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
GE 6000	45.1	48.9	50.4	51.8	51.8	52.8	53.5	54.2	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
GE 5000	46.1	50.0	51.4	52.8	52.8	53.9	54.6	55.3	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6
GE 4000	46.1	50.0	51.4	52.8	52.8	53.9	54.6	55.3	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6
GE 3000	46.1	50.0	51.4	52.8	52.8	53.9	54.6	55.3	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6
GE 2000	46.1	50.0	51.4	52.8	52.8	53.9	54.6	55.3	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6
GE 1500	61.3	67.3	68.7	70.4	70.4	72.5	74.3	75.4	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
GE 1000	61.3	67.3	68.7	70.4	70.4	72.5	74.3	75.4	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
GE 800	62.3	68.3	69.7	71.5	71.5	73.6	75.4	76.4	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
GE 600	63.0	69.4	70.6	72.5	72.5	75.0	76.8	77.8	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2
GE 400	69.4	76.9	81.0	84.9	85.6	89.4	91.9	94.0	96.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
GE 300	69.4	76.9	81.0	84.9	85.6	89.4	91.9	94.0	96.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
GE 200	69.4	76.9	81.0	84.9	85.6	89.4	91.9	94.0	96.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
GE 100	69.7	79.6	81.7	85.6	86.3	90.1	92.6	95.1	97.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 50	69.7	79.6	81.7	85.6	86.3	90.1	92.6	95.1	97.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 30	69.7	79.6	81.7	85.6	86.3	90.1	92.6	95.1	97.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 20	69.7	79.6	81.7	85.6	86.3	90.1	92.6	95.1	97.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 10	69.7	79.6	81.7	85.6	86.3	90.1	92.6	95.1	97.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 5	69.7	79.6	81.7	85.6	86.3	90.1	92.6	95.1	97.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS: 234

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAL

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS(LEST): 1500-1700

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO CEIL	30.1	30.4	31.2	31.2	31.2	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
GE 2000	29.4	40.4	40.4	40.8	40.4	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 1800	39.4	40.4	40.4	40.8	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 1600	39.4	40.4	40.4	40.8	40.4	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 1400	29.4	40.4	40.4	40.8	40.4	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 1200	39.4	40.4	40.4	40.8	40.4	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 1000	52.7	54.5	54.4	54.8	54.8	55.1	55.1	55.1	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
GE 900	52.7	54.5	54.4	54.8	54.8	55.1	55.1	55.1	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
GE 800	52.7	54.5	54.4	54.8	54.8	55.1	55.1	55.1	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
GE 700	52.7	54.5	54.4	54.8	54.8	55.1	55.1	55.1	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
GE 600	52.7	54.5	54.4	54.8	54.8	55.1	55.1	55.1	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
GE 500	54.1	55.5	56.2	56.2	56.2	56.8	56.8	56.8	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2
GE 400	54.1	55.5	56.2	56.2	56.2	56.8	56.8	56.8	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2
GE 300	56.8	58.9	59.2	59.2	59.2	59.9	59.9	59.9	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3
GE 200	56.8	58.9	59.2	59.2	59.2	59.9	59.9	59.9	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3
GE 100	57.9	59.9	60.3	60.3	60.3	61.0	61.0	61.0	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
GE 2500	72.6	76.7	77.1	77.1	77.1	77.7	77.7	77.7	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
GE 2000	75.0	79.5	79.8	79.8	79.8	80.8	80.8	80.8	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2
GE 1800	75.7	80.5	80.8	80.8	81.2	82.2	82.2	82.2	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5
GE 1600	76.0	81.2	81.5	81.5	81.5	82.9	82.9	82.9	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
GE 1400	83.2	91.1	91.4	91.1	91.2	91.2	91.2	91.2	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
GE 1200	83.6	90.4	92.1	92.8	93.8	95.9	95.9	95.9	97.9	98.6	99.6	99.6	99.6	99.6	99.6	99.6
GE 1000	83.6	90.4	92.1	92.8	93.8	95.9	95.9	95.9	98.2	98.6	99.3	99.3	99.3	99.3	99.3	99.3
GE 900	83.6	90.4	92.1	92.8	93.8	95.9	95.9	95.9	98.2	98.6	99.3	99.3	99.3	99.3	99.3	99.3
GE 800	83.9	91.1	92.4	93.2	94.2	96.2	96.2	96.6	99.0	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 700	83.9	91.1	92.4	93.2	94.2	96.2	96.2	96.6	99.0	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 600	83.9	91.1	92.4	93.2	94.2	96.2	96.2	96.6	99.0	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 500	83.9	91.1	92.4	93.2	94.2	96.2	96.2	96.6	99.0	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 400	83.9	91.1	92.4	93.2	94.2	96.2	96.2	96.6	99.0	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 300	83.9	91.1	92.4	93.2	94.2	96.2	96.2	96.6	99.0	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 200	83.9	91.1	92.4	93.2	94.2	96.2	96.2	96.6	99.0	99.7	99.7	99.7	99.7	99.7	99.7	99.7

TOTAL NUMBER OF OBSERVATIONS: 242

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAL

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS(IST): 1800-2000

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1 100	2 200	3 300	4 400	5 500	6 600	7 700	8 800	9 900	10 1000	11 1100	12 1200	13 1300	14 1400	15 1500	16 1600
NO CEIL	30.3	72.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
GE 20000	35.6	78.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4
GE 18000	35.6	78.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4
GE 16000	35.6	78.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4
GE 14000	35.6	78.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4
GE 12000	35.6	78.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4
GE 10000	52.5	56.3	56.3	56.7	56.7	56.7	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0
GE 9000	52.5	56.3	56.3	56.7	56.7	56.7	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0
GE 8000	52.5	56.3	56.3	56.7	56.7	56.7	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0
GE 7000	52.5	56.3	56.3	56.7	56.7	56.7	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0
GE 6000	52.5	56.3	56.3	56.7	56.7	56.7	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0
GE 5000	52.5	56.3	56.3	56.7	56.7	56.7	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0
GE 4000	52.5	56.3	56.3	56.7	56.7	56.7	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0
GE 3000	56.3	60.6	60.6	60.9	60.9	60.9	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
GE 2000	56.7	60.9	60.9	61.3	61.3	61.3	61.6	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
GE 1800	69.0	75.0	75.0	77.5	77.5	77.5	78.2	78.9	79.2	79.9	79.9	79.9	79.9	79.9	79.9	79.9
GE 1600	69.0	75.0	75.0	77.5	77.5	77.5	78.2	78.9	79.2	79.9	79.9	79.9	79.9	79.9	79.9	79.9
GE 1400	69.7	75.6	75.6	79.2	79.2	79.2	80.3	81.0	81.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0
GE 1200	71.1	76.2	76.2	80.6	80.6	80.6	81.7	82.4	82.7	83.5	83.5	83.5	83.5	83.5	83.5	83.5
GE 1000	76.8	80.9	80.9	86.7	86.7	86.7	89.2	91.2	92.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
GE 900	77.1	85.2	85.2	89.2	89.2	89.2	90.1	92.3	93.3	94.4	94.7	94.7	94.7	94.7	94.7	94.7
GE 800	77.5	85.6	85.6	89.4	89.4	89.4	90.5	92.6	93.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
GE 700	77.5	85.6	85.6	89.4	89.4	89.4	90.5	92.6	93.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
GE 600	77.5	85.6	85.6	89.4	89.4	89.4	90.5	92.6	93.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
GE 500	77.5	85.6	85.6	89.4	89.4	89.4	90.5	92.6	93.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
GE 400	77.5	85.6	85.6	89.4	89.4	89.4	90.5	92.6	93.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
GE 300	77.5	85.6	85.6	89.4	89.4	89.4	90.5	92.6	93.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
GE 200	77.5	85.6	85.6	89.4	89.4	89.4	90.5	92.6	93.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
GE 100	77.5	85.6	85.6	89.4	89.4	89.4	90.5	92.6	93.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7

TOTAL NUMBER OF OBSERVATIONS: 249

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221150 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR HOURS (LST): 2100-2300

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN FEET	1 100	GE 90	GE 80	GE 70	GE 60	GE 48	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 6	GE 4	GE 0
NO CEIL	31.6	33.6	33.0	33.9	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6
GE 20000	37.7	43.1	47.1	40.4	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 18000	37.7	43.1	47.1	40.4	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 16000	37.7	43.1	47.1	40.4	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 14000	37.7	43.1	47.1	40.4	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 12000	37.7	43.1	47.1	40.4	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 10000	49.3	54.5	55.1	56.2	56.8	56.8	56.8	57.2	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
GE 9000	49.3	54.5	55.1	56.2	56.8	56.8	56.8	57.2	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
GE 8000	49.3	54.5	55.1	56.2	56.8	56.8	56.8	57.2	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
GE 7000	49.3	54.5	55.1	56.2	56.8	56.8	56.8	57.2	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
GE 6000	49.3	54.5	55.1	56.2	56.8	56.8	56.8	57.2	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
GE 5000	49.7	55.5	56.2	57.2	57.9	57.9	57.9	58.2	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6
GE 4500	50.7	56.5	57.2	58.2	58.9	58.9	58.9	59.2	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
GE 4000	52.7	59.2	59.9	61.0	61.6	61.6	61.6	62.0	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3
GE 3500	53.1	59.6	60.3	61.3	62.0	62.0	62.0	62.3	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
GE 3000	53.4	59.9	60.6	61.6	62.3	62.3	62.3	62.7	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
GE 2500	63.4	71.2	71.9	72.9	74.3	74.7	74.7	75.3	75.7	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
GE 2000	65.4	74.7	75.3	76.4	77.4	78.1	78.8	79.1	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
GE 1800	66.8	76.7	77.4	78.4	79.5	80.1	80.8	81.2	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8
GE 1600	69.2	78.1	78.8	79.8	80.8	81.5	82.5	82.9	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6
GE 1400	71.9	84.9	86.3	86.7	90.4	92.5	93.5	94.9	96.9	97.3	97.3	97.6	97.9	98.3	98.3	98.3	98.3
GE 1200	72.3	85.3	86.6	89.0	93.8	93.8	93.8	95.2	97.3	97.6	97.6	97.9	98.3	98.6	98.6	98.6	98.6
GE 1000	72.3	85.3	86.6	89.0	93.8	93.8	93.8	95.2	97.3	97.6	97.6	97.9	98.3	98.6	98.6	98.6	98.6
GE 900	72.3	85.3	86.6	89.0	93.8	93.8	93.8	95.2	97.3	97.6	97.6	97.9	98.3	98.6	98.6	98.6	98.6
GE 800	72.6	86.0	87.7	90.1	91.4	93.5	94.5	95.9	98.3	98.6	98.6	98.9	99.3	99.7	99.7	99.7	99.7
GE 700	72.6	86.0	87.7	90.1	91.4	93.8	94.9	96.2	98.6	99.0	99.0	99.3	99.7	100.0	100.0	100.0	100.0
GE 600	72.6	86.0	87.7	90.1	91.4	93.8	94.9	96.2	98.6	99.0	99.0	99.3	99.7	100.0	100.0	100.0	100.0
GE 500	72.6	86.0	87.7	90.1	91.4	93.8	94.9	96.2	98.6	99.0	99.0	99.3	99.7	100.0	100.0	100.0	100.0
GE 400	72.6	86.0	87.7	90.1	91.4	93.8	94.9	96.2	98.6	99.0	99.0	99.3	99.7	100.0	100.0	100.0	100.0
GE 300	72.6	86.0	87.7	90.1	91.4	93.8	94.9	96.2	98.6	99.0	99.0	99.3	99.7	100.0	100.0	100.0	100.0
GE 200	72.6	86.0	87.7	90.1	91.4	93.8	94.9	96.2	98.6	99.0	99.0	99.3	99.7	100.0	100.0	100.0	100.0
GE 100	72.6	86.0	87.7	90.1	91.4	93.8	94.9	96.2	98.6	99.0	99.0	99.3	99.7	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 292

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

844

MONTH: APR

HOURS (LST):

844

NO	CEIL	VISIBILITY IN HUNDREDS OF METERS															
		CEILING															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
01	00000	32.6	35.4	36.1	36.8	37.2	37.7	38.0	38.5	38.8	38.9	38.9	38.9	38.9	38.9	38.9	38.9
02	00001	32.6	35.4	36.1	36.8	37.2	37.7	38.0	38.5	38.8	38.9	38.9	38.9	38.9	38.9	38.9	38.9
03	00002	32.6	35.4	36.1	36.8	37.2	37.7	38.0	38.5	38.8	38.9	38.9	38.9	38.9	38.9	38.9	38.9
04	00003	32.6	35.4	36.1	36.8	37.2	37.7	38.0	38.5	38.8	38.9	38.9	38.9	38.9	38.9	38.9	38.9
05	00004	32.6	35.4	36.1	36.8	37.2	37.7	38.0	38.5	38.8	38.9	38.9	38.9	38.9	38.9	38.9	38.9
06	00005	32.6	35.4	36.1	36.8	37.2	37.7	38.0	38.5	38.8	38.9	38.9	38.9	38.9	38.9	38.9	38.9
07	00006	32.6	35.4	36.1	36.8	37.2	37.7	38.0	38.5	38.8	38.9	38.9	38.9	38.9	38.9	38.9	38.9
08	00007	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
09	00008	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
10	00009	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
11	00010	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
12	00011	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
13	00012	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
14	00013	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
15	00014	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
16	00015	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
17	00016	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
18	00017	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
19	00018	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
20	00019	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
21	00020	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
22	00021	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
23	00022	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
24	00023	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
25	00024	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
26	00025	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
27	00026	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
28	00027	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
29	00028	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
30	00029	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
31	00030	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
32	00031	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
33	00032	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
34	00033	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
35	00034	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
36	00035	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
37	00036	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
38	00037	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
39	00038	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
40	00039	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
41	00040	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
42	00041	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
43	00042	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
44	00043	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
45	00044	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
46	00045	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
47	00046	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
48	00047	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
49	00048	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
50	00049	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
51	00050	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
52	00051	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
53	00052	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
54	00053	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
55	00054	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
56	00055	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
57	00056	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
58	00057	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
59	00058	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
60	00059	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
61	00060	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
62	00061	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
63	00062	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
64	00063	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
65	00064	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
66	00065	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
67	00066	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
68	00067	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
69	00068	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
70	00069	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
71	00070	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
72	00071	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
73	00072	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
74	00073	44.1	44.5	44.7	44.9	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0
75	0007																

TOTAL NUMBER OF OBSERVATIONS: 2157

GLOBAL CLIMATOLOGY BRANCH
USAF/ATC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MORMANSK USSR

PERIOD OF RECORD: 78-87

MONTH: MAY HOURS (LST): 0000-0200

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 100	GE 200	GE 300	GE 400	GE 500	GE 600	GE 700	GE 800	GE 900	GE 1000	GE 1200	GE 1400	GE 1600	GE 1800	GE 2000	GE 2500
NO CEIL	25.2	25.9	25.9	26.3	26.3	27.3	27.3	27.3	27.6	27.6	27.6	27.6	27.6	27.6	27.9	28.3
GE 20000	23.9	27.6	27.9	28.3	28.3	29.3	29.3	29.3	29.6	29.6	29.6	29.6	29.6	29.6	30.0	30.3
GE 14000	23.9	27.6	27.9	28.3	28.3	29.3	29.3	29.3	29.6	29.6	29.6	29.6	29.6	29.6	30.0	30.3
GE 16000	23.9	27.6	27.9	28.3	28.3	29.3	29.3	29.3	29.6	29.6	29.6	29.6	29.6	29.6	30.0	30.3
GE 14000	23.9	27.6	27.9	28.3	28.3	29.3	29.3	29.3	29.6	29.6	29.6	29.6	29.6	29.6	30.0	30.3
GE 12000	23.9	27.6	27.9	28.3	28.3	29.3	29.3	29.3	29.6	29.6	29.6	29.6	29.6	29.6	30.0	30.3
GE 10000	35.7	40.7	41.4	41.8	42.4	43.4	43.4	43.4	44.1	44.1	44.1	44.1	44.1	44.1	44.4	44.8
GE 9000	35.7	40.7	41.4	41.8	42.4	43.4	43.4	43.4	44.1	44.1	44.1	44.1	44.1	44.1	44.4	44.8
GE 8000	35.7	40.7	41.4	41.8	42.4	43.4	43.4	43.4	44.1	44.1	44.1	44.1	44.1	44.1	44.4	44.8
GE 7000	35.7	40.7	41.4	41.8	42.4	43.4	43.4	43.4	44.1	44.1	44.1	44.1	44.1	44.1	44.4	44.8
GE 6000	35.7	40.7	41.4	41.8	42.4	43.4	43.4	43.4	44.1	44.1	44.1	44.1	44.1	44.1	44.4	44.8
GE 5000	36.4	41.4	42.1	42.4	43.1	44.1	44.1	44.1	44.8	44.8	44.8	44.8	44.8	44.8	45.1	45.5
GE 4000	36.7	41.8	42.4	42.4	43.4	44.4	44.4	44.4	45.1	45.1	45.1	45.1	45.1	45.1	45.5	45.8
GE 3000	42.1	47.5	48.1	48.5	49.2	50.2	50.2	50.2	50.8	50.8	50.8	50.8	50.8	50.8	51.2	51.5
GE 2000	43.8	49.2	49.8	50.2	50.8	51.9	51.9	51.9	52.5	52.5	52.5	52.5	52.5	52.5	52.9	53.2
GE 1000	46.5	51.9	52.5	52.9	53.5	54.5	54.5	54.5	55.2	55.2	55.2	55.2	55.2	55.2	55.6	55.9
GE 2000	60.2	68.7	69.7	70.7	71.4	72.7	72.7	72.7	73.4	73.4	73.4	73.4	73.4	73.4	73.7	74.4
GE 2000	60.2	70.0	71.1	72.1	72.7	74.1	74.1	74.1	74.7	74.7	74.7	74.7	74.7	74.7	75.1	75.8
GE 1800	62.3	71.4	72.4	73.4	74.1	75.4	75.4	75.4	76.1	76.1	76.1	76.1	76.1	76.1	76.4	77.1
GE 1600	66.0	75.8	76.8	77.3	78.5	79.8	79.8	79.8	80.5	80.5	80.5	80.5	80.5	80.5	80.8	81.5
GE 1400	74.7	85.5	86.5	87.2	88.6	91.9	92.3	92.3	93.6	93.9	93.9	93.9	93.9	93.9	94.6	95.3
GE 1200	75.3	85.5	87.5	89.2	91.6	92.9	93.3	93.3	94.6	94.9	94.9	94.9	94.9	94.9	95.6	96.3
GE 1000	76.4	87.2	88.2	91.2	92.6	93.9	94.3	94.3	95.6	96.0	96.0	96.0	96.0	96.0	96.6	97.3
GE 800	76.8	87.5	88.6	91.6	92.9	94.3	94.6	94.6	96.0	96.7	96.7	96.7	96.7	96.7	97.0	97.6
GE 700	76.8	87.9	88.9	91.9	93.6	94.9	95.3	95.3	96.6	97.3	97.3	97.3	97.3	97.3	98.0	98.7
GE 600	76.8	87.9	88.9	92.3	93.9	95.3	95.6	95.6	97.0	97.6	97.6	97.6	97.6	97.6	98.3	99.0
GE 500	76.8	87.9	88.9	92.3	93.9	95.3	95.6	95.6	97.0	97.6	97.6	97.6	97.6	97.6	98.3	99.0
GE 400	76.8	87.9	88.9	92.3	93.9	95.6	96.0	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.7	99.3
GE 300	76.8	87.9	88.9	92.3	93.9	95.6	96.0	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.7	99.3
GE 200	76.8	87.9	88.9	92.3	93.9	95.6	96.0	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.7	99.3
GE 100	76.8	87.9	88.9	92.3	93.9	95.6	96.0	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.7	99.3
GE 0	76.8	7.9	18.9	92.3	94.3	95.6	96.0	96.0	97.3	98.0	98.0	98.0	98.0	98.0	99.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 277

GLOBAL CLIMATOLOGY BRANCH
USAF/CIAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87

MONTH: MAY

HOURS(LST): 0300-0500

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO CLD	15.7	17.0	20.2	21.0	22.3	22.6	27.0	23.0	23.3	23.3	27.3	23.3	23.3	23.3	23.3	23.3
GE 20000	19.7	23.3	24.3	26.6	27.2	27.5	27.9	27.9	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
GE 18000	19.7	23.3	24.3	26.6	27.2	27.5	27.9	27.9	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
GE 16000	19.7	23.3	24.3	26.6	27.2	27.5	27.9	27.9	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
GE 14000	19.7	23.3	24.3	26.6	27.2	27.5	27.9	27.9	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
GE 12000	19.7	23.3	24.3	26.6	27.2	27.5	27.9	27.9	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
GE 10000	28.9	34.1	35.1	37.4	38.3	38.4	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
GE 9000	28.9	34.1	35.1	37.4	38.3	38.4	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
GE 8000	28.9	34.1	35.1	37.4	38.3	38.4	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
GE 7000	28.9	34.1	35.1	37.4	38.3	38.4	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
GE 6000	28.9	34.1	35.1	37.4	38.3	38.4	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
GE 5000	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 4000	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 3000	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 2000	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 1000	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 500	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 100	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 50	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 20	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 10	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 5	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 2	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 1	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 0	30.2	35.4	36.4	38.7	39.3	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0

TOTAL NUMBER OF OBSERVATIONS: 305

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87
MONTH: MAY HOURS(LST): 0600-0800

CEILING	VISIBILITY IN HUNDREDS OF METERS															
	IN FEET	GE 100	GE 200	GE 300	GE 400	GE 500	GE 600	GE 700	GE 800	GE 900	GE 1000	GE 1200	GE 1400	GE 1600	GE 1800	GE 2000
NO CEIL	1	20.9	22.8	22.8	23.5	24.5	24.5	24.8	24.8	25.2	25.2	25.2	25.2	25.2	25.2	25.2
GE 20000	2	23.2	25.2	25.2	25.5	27.5	27.5	27.8	28.1	28.5	28.5	28.5	28.5	28.5	28.5	28.5
GE 13000	3	23.2	25.2	25.2	25.5	27.5	27.5	27.8	28.1	28.5	28.5	28.5	28.5	28.5	28.5	28.5
GE 15000	4	23.2	25.2	25.2	25.5	27.5	27.5	27.8	28.1	28.5	28.5	28.5	28.5	28.5	28.5	28.5
GE 14000	5	23.2	25.2	25.2	25.5	27.5	27.5	27.8	28.1	28.5	28.5	28.5	28.5	28.5	28.5	28.5
GE 12000	6	23.2	25.2	25.2	25.5	27.5	27.5	27.8	28.1	28.5	28.5	28.5	28.5	28.5	28.5	28.5
GE 10000	7	32.1	35.4	35.4	37.7	39.4	39.7	40.1	40.4	40.7	40.7	40.7	41.1	41.1	41.1	41.1
GE 9000	8	32.1	35.4	35.4	37.7	39.4	39.7	40.1	40.4	40.7	40.7	40.7	41.1	41.1	41.1	41.1
GE 8000	9	32.1	35.4	35.4	37.7	39.4	39.7	40.1	40.4	40.7	40.7	40.7	41.1	41.1	41.1	41.1
GE 7000	10	32.1	35.4	35.4	37.7	39.4	39.7	40.1	40.4	40.7	40.7	40.7	41.1	41.1	41.1	41.1
GE 6000	11	32.1	35.4	35.4	37.7	39.4	39.7	40.1	40.4	40.7	40.7	40.7	41.1	41.1	41.1	41.1
GE 5000	12	32.1	37.1	37.1	38.4	40.1	40.4	40.7	41.1	41.4	41.4	41.4	41.7	41.7	41.7	41.7
GE 4000	13	37.1	37.4	37.4	38.7	40.4	40.7	41.1	41.4	41.7	41.7	41.7	42.1	42.1	42.1	42.1
GE 3000	14	37.4	40.4	40.4	43.7	45.4	45.7	46.0	46.4	46.7	46.7	46.7	47.0	47.0	47.0	47.0
GE 2000	15	38.7	43.7	43.7	45.0	46.7	47.0	47.4	47.7	48.0	48.0	48.0	48.3	48.3	48.3	48.3
GE 1000	16	39.7	44.7	44.7	46.0	47.7	48.0	48.4	48.7	49.0	49.0	49.0	49.3	49.3	49.3	49.3
GE 500	17	50.6	59.3	59.3	61.3	63.7	64.2	64.9	65.2	65.6	65.6	65.6	66.2	66.2	66.2	66.2
GE 200	18	54.6	61.3	61.3	63.2	65.8	66.2	66.9	67.2	67.5	67.5	67.5	68.2	68.2	68.2	68.2
GE 100	19	56.7	62.0	62.0	64.0	67.2	67.5	68.2	68.5	68.9	68.9	68.9	69.5	69.5	69.5	69.5
GE 50	20	57.3	64.0	64.0	66.0	69.2	69.5	70.2	70.5	70.9	70.9	70.9	71.5	71.5	71.5	71.9
GE 20	21	66.9	76.2	76.2	79.5	83.1	83.8	85.1	86.4	87.4	87.7	87.7	89.4	88.7	88.7	89.1
GE 10	22	67.5	77.9	77.9	82.1	85.8	86.4	87.7	89.1	90.1	90.4	90.4	91.1	91.4	91.4	91.7
GE 5	23	69.2	79.3	79.3	83.1	86.3	87.4	88.7	90.1	91.1	91.4	91.4	92.1	92.4	92.4	92.7
GE 1	24	69.9	79.1	79.1	84.1	88.1	88.7	90.1	91.7	92.7	93.0	93.0	93.7	94.0	94.0	94.4

TOTAL NUMBER OF OBSERVATIONS: 732

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87

MONTH: MAY

HOURS(EST): 0900-1100

CEILING		VISIBILITY IN HUNDREDS OF METERS																
IN	FEET	GE 100	GE 90	GE 80	GE 70	GE 60	GE 50	GE 40	GE 30	GE 24	GE 20	GE 16	GE 12	GE 10	GE 9	GE 5	GE 4	GE 0
NO CEIL	1	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9
GE 20000	25.2	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
GE 18000	25.2	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
GE 16000	25.2	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
GE 14000	25.2	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
GE 12000	25.2	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
GE 10000	33.9	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
GE 9000	33.9	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
GE 8000	33.9	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
GE 7000	33.9	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
GE 6000	33.9	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
GE 5000	33.9	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
GE 4000	33.9	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
GE 3000	41.9	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
GE 2000	50.5	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
GE 1800	50.5	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
GE 1600	50.5	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
GE 1400	50.5	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
GE 1200	50.5	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
GE 1000	75.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
GE 900	75.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
GE 800	75.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
GE 700	75.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
GE 600	75.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
GE 500	75.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
GE 400	75.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
GE 300	75.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
GE 200	75.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
GE 100	75.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
GE 0	75.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4

TOTAL NUMBER OF OBSERVATIONS: 301

GLOBAL CLIMATOLOGY BRANCH
USAF/CLTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87

MONTH: MAY HOURS(IST): 1200-1400

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 200	GE 240	GE 280	GE 320	GE 360	GE 400	GE 480	GE 560	GE 640	GE 720	GE 800	GE 880	GE 960	GE 1040	GE 1120
NO CEIL	23.4	23.7	24.1	24.1	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
GE 20000	27.1	27.6	28.1	28.1	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
GE 18000	27.1	27.6	28.1	28.1	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
GE 16000	27.1	27.6	28.1	28.1	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
GE 14000	27.1	27.6	28.1	28.1	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
GE 12000	27.1	27.6	28.1	28.1	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
GE 10000	36.5	38.1	39.1	39.5	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
GE 9000	36.5	38.1	39.1	39.5	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
GE 8000	36.5	38.1	39.1	39.5	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
GE 7000	36.5	38.1	39.1	39.5	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
GE 6000	36.5	38.1	39.1	39.5	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
GE 5000	37.1	38.8	39.8	40.1	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
GE 4500	37.1	38.8	39.8	40.1	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
GE 4000	43.1	45.2	46.2	46.5	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
GE 3500	44.1	46.2	47.2	47.5	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2
GE 3000	46.2	48.2	49.2	49.5	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2
GE 2500	67.9	68.9	69.2	69.6	70.6	70.6	70.6	70.6	70.9	70.9	71.9	71.9	71.2	71.2	71.2	71.2
GE 2000	64.2	64.6	64.9	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6
GE 1800	64.2	64.6	64.9	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6
GE 1600	67.2	67.6	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
GE 1400	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
GE 1200	79.6	88.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 1000	79.6	88.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 800	80.3	88.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 700	80.3	88.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 600	80.3	88.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 500	80.3	88.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 400	80.3	88.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 300	80.3	88.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 200	80.3	88.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 100	80.3	88.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 0	80.3	88.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0

TOTAL NUMBER OF OBSERVATIONS: 299

GLOBE CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 22113L STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87

MONTH: MAY

HOURS(IST): 1500-1700

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS																	
	1 100	GE 90	GE 80	GE 70	GE 60	GE 50	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0	
NO CEIL	27.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	
GE 2000	26.9	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	
GE 1800	26.9	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	
GE 1600	26.9	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	
GE 1400	26.9	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	
GE 1200	26.9	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	
GE 1000	37.7	38.4	38.4	38.4	38.7	38.7	38.7	38.7	38.7	39.1	39.4	39.4	39.4	39.4	39.4	39.4	39.4	
GE 900	37.7	38.4	38.4	38.4	38.7	38.7	38.7	38.7	38.7	39.1	39.4	39.4	39.4	39.4	39.4	39.4	39.4	
GE 800	37.7	38.4	38.4	38.4	38.7	38.7	38.7	38.7	38.7	39.1	39.4	39.4	39.4	39.4	39.4	39.4	39.4	
GE 700	37.7	38.4	38.4	38.4	38.7	38.7	38.7	38.7	38.7	39.1	39.4	39.4	39.4	39.4	39.4	39.4	39.4	
GE 600	37.7	38.4	38.4	38.4	38.7	38.7	38.7	38.7	38.7	39.1	39.4	39.4	39.4	39.4	39.4	39.4	39.4	
GE 500	38.4	39.1	39.1	39.1	39.4	39.4	39.4	39.4	39.4	39.7	40.1	40.1	40.1	40.1	40.1	40.1	40.1	
GE 400	38.4	39.1	39.1	39.1	39.4	39.4	39.4	39.4	39.4	39.7	40.1	40.1	40.1	40.1	40.1	40.1	40.1	
GE 300	43.1	43.6	43.6	43.6	44.1	44.1	44.1	44.1	44.1	44.4	44.8	44.8	44.8	44.8	44.8	44.8	44.8	
GE 200	45.1	45.6	45.6	45.6	46.1	46.1	46.1	46.1	46.1	46.5	46.8	46.8	46.8	46.8	46.8	46.8	46.8	
GE 100	46.1	46.6	46.6	46.6	47.1	47.1	47.1	47.1	47.1	47.5	47.8	47.8	47.8	47.8	47.8	47.8	47.8	
GE 2500	64.7	71.7	71.7	71.7	72.7	73.1	73.4	73.4	73.7	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	
GE 2000	71.4	74.4	74.4	74.4	75.4	75.6	76.1	76.1	76.1	76.4	76.8	76.8	76.8	76.8	76.8	76.8	76.8	
GE 1800	73.1	76.1	76.1	76.1	77.1	77.4	77.8	77.8	78.1	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	
GE 1600	74.4	77.4	77.4	77.4	78.4	78.8	79.1	79.1	79.1	79.8	80.1	80.5	80.5	80.5	80.5	80.5	80.5	
GE 1400	84.9	90.9	90.9	90.9	93.3	93.3	93.3	93.3	94.6	95.6	96.3	96.6	96.6	96.6	96.6	96.6	96.6	
GE 1200	85.0	91.6	91.9	91.9	93.3	94.3	95.3	95.3	96.0	97.0	97.6	98.0	98.0	98.0	98.0	98.0	98.0	
GE 1000	85.2	91.6	91.9	91.9	93.3	94.3	95.3	95.3	96.0	97.0	97.6	98.0	98.0	98.0	98.0	98.0	98.0	
GE 900	85.2	91.6	91.9	91.9	93.3	94.3	95.3	95.3	96.0	97.0	97.6	98.0	98.0	98.0	98.0	98.0	98.0	
GE 800	85.2	92.6	92.9	92.9	93.3	94.6	95.6	95.6	96.6	97.3	98.3	99.0	99.0	99.0	99.3	99.3	99.3	
GE 700	85.2	92.6	92.9	92.9	93.3	94.6	95.6	95.6	96.6	97.3	98.3	99.0	99.0	99.0	99.3	99.3	99.3	
GE 600	85.2	92.6	92.9	92.9	93.3	94.6	95.6	95.6	96.6	97.3	98.3	99.0	99.0	99.0	99.3	99.3	99.3	
GE 500	85.2	92.6	92.9	92.9	93.3	94.6	95.6	95.6	96.6	97.0	97.6	98.0	98.0	98.0	98.0	98.0	98.0	
GE 400	85.2	92.6	92.9	92.9	93.3	94.6	95.6	95.6	96.6	97.0	97.6	98.0	98.0	98.0	98.0	98.0	98.0	
GE 300	85.2	92.6	92.9	92.9	93.3	94.6	95.6	95.6	96.6	97.0	97.6	98.0	98.0	98.0	98.0	98.0	98.0	
GE 200	85.2	92.6	92.9	92.9	93.3	94.6	95.6	95.6	96.6	97.0	97.6	98.0	98.0	98.0	98.0	98.0	98.0	
GE 100	85.2	92.6	92.9	92.9	93.3	94.6	95.6	95.6	96.6	97.0	97.6	98.0	98.0	98.0	98.0	98.0	98.0	

TOTAL NUMBER OF OBSERVATIONS: 297

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MUHOMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAY HOURS(LST): 1800-2000

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1 10.0	2 20.0	3 30.0	4 40.0	5 50.0	6 60.0	7 70.0	8 80.0	9 90.0	10 100.0	11 110.0	12 120.0	13 130.0	14 140.0	15 150.0	16 160.0
NO CEIL	25.8	26.4	26.4	26.6	26.6	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
GE 20000	31.1	31.8	31.8	32.1	32.1	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4
GE 18000	31.1	31.6	31.6	32.1	32.1	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4
GE 16000	31.1	31.8	31.8	32.1	32.1	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4
GE 14000	31.1	31.8	31.8	32.1	32.1	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4
GE 12000	31.1	31.8	31.8	32.1	32.1	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4
GE 10000	41.1	41.8	41.8	42.1	42.1	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
GE 9000	41.1	41.8	41.8	42.1	42.1	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
GE 8000	41.1	41.8	41.8	42.1	42.1	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
GE 7000	41.1	41.8	41.8	42.1	42.1	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
GE 6000	41.1	41.8	41.8	42.1	42.1	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
GE 5000	41.1	41.8	41.8	42.1	42.1	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
GE 4000	41.5	42.1	42.1	42.5	42.5	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8
GE 3000	48.5	49.2	49.2	49.5	49.5	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
GE 2000	51.2	51.3	51.3	52.2	52.2	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5
GE 1000	53.5	54.2	54.2	54.5	54.5	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8
GE 750.0	73.9	74.9	74.9	75.6	75.6	75.9	75.9	76.3	76.3	76.6	76.6	76.6	76.6	76.6	76.6	76.6
GE 600.0	73.2	73.2	73.3	73.6	73.6	73.9	73.9	73.9	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
GE 450.0	74.2	74.2	74.3	74.6	74.6	74.9	74.9	74.9	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6
GE 300.0	74.2	74.2	74.3	74.6	74.6	74.9	74.9	74.9	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6
GE 150.0	75.3	75.3	75.3	75.9	75.9	76.3	76.3	76.3	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
GE 100.0	75.3	75.3	75.3	75.9	75.9	76.3	76.3	76.3	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
GE 75.0	86.7	86.7	86.7	87.3	87.3	87.6	87.6	87.6	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3
GE 100.0	90.0	90.0	90.0	90.3	90.3	90.7	90.7	90.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
GE 90.0	90.0	90.0	90.0	90.3	90.3	90.7	90.7	90.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
GE 80.0	90.0	90.0	90.0	90.3	90.3	90.7	90.7	90.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
GE 70.0	90.0	90.0	90.0	90.3	90.3	90.7	90.7	90.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
GE 60.0	90.0	90.0	90.0	90.3	90.3	90.7	90.7	90.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
GE 50.0	90.0	90.0	90.0	90.3	90.3	90.7	90.7	90.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
GE 40.0	90.0	90.0	90.0	90.3	90.3	90.7	90.7	90.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
GE 30.0	90.0	90.0	90.0	90.3	90.3	90.7	90.7	90.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
GE 20.0	90.0	90.0	90.0	90.3	90.3	90.7	90.7	90.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
GE 10.0	90.0	90.0	90.0	90.3	90.3	90.7	90.7	90.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0

TOTAL NUMBER OF OBSERVATIONS: 299

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 22133 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAY HOURS(IST): 2100-2300

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO CEIL	22.6	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3
GE 20000	27.2	28.9	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
GE 18000	27.2	28.9	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
GE 16000	27.2	28.9	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
GE 14000	27.2	28.9	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
GE 12000	27.2	28.9	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
GE 10000	44.5	46.5	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
GE 9000	44.5	46.5	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
GE 8000	44.5	46.5	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
GE 7000	44.5	46.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
GE 6000	45.2	47.2	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
GE 5000	45.2	47.2	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
GE 4000	45.8	47.8	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5
GE 3000	51.2	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8
GE 2000	52.5	54.5	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1
GE 1000	53.5	55.8	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5
GE 2500	62.8	73.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
GE 2000	72.8	76.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7
GE 1500	73.8	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
GE 1000	76.7	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4
GE 1000	86.7	92.0	94.0	94.4	94.7	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
GE 1000	87.0	93.7	94.7	95.3	95.7	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
GE 800	87.4	94.7	95.7	96.7	97.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 600	87.4	94.7	95.7	96.7	97.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 500	87.4	94.7	95.7	96.7	97.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 400	87.4	94.7	95.7	96.7	97.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 300	87.4	94.7	95.7	96.7	97.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 200	87.4	94.7	95.7	96.7	97.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 100	87.4	94.7	95.7	96.7	97.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 100	87.4	94.7	95.7	96.7	97.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3

TOTAL NUMBER OF OBSERVATIONS: 301

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAY HOURS(IST): ALL

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS																	
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30	40
NO CEIL	21.9	21.6	23.7	24.2	24.5	24.7	24.8	24.8	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	25.0
GE 0000	25.5	27.4	27.7	28.2	23.6	26.6	28.9	28.9	29.7	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1
GE 1000	25.5	27.4	27.7	28.2	23.6	26.8	28.9	28.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1
GE 1600	25.5	27.4	27.7	26.2	23.6	28.8	28.9	28.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1
GE 1400	25.5	27.4	27.7	28.2	23.6	26.8	28.9	28.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1
GE 1200	25.5	27.4	27.7	28.2	23.6	26.8	28.9	28.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1
GE 1000	36.3	39.3	39.8	40.4	41.0	41.3	41.4	41.4	41.6	41.7	41.7	41.7	41.8	41.8	41.8	41.8	41.8	41.9
GE 9000	36.3	39.3	39.8	40.4	41.0	41.3	41.4	41.4	41.6	41.7	41.7	41.7	41.8	41.8	41.8	41.8	41.8	41.9
GE 8000	36.3	39.3	39.8	40.4	41.0	41.3	41.4	41.4	41.6	41.7	41.7	41.7	41.8	41.8	41.8	41.8	41.8	41.9
GE 7000	36.3	39.4	39.8	40.5	41.1	41.3	41.4	41.4	41.6	41.7	41.7	41.7	41.8	41.8	41.8	41.9	41.9	41.9
GE 6000	36.4	39.4	39.9	40.5	41.1	41.4	41.4	41.4	41.6	41.7	41.8	41.8	41.9	41.9	41.9	41.9	41.9	41.9
GE 5000	36.9	39.9	40.4	41.0	41.6	41.9	41.9	42.0	42.2	42.3	42.3	42.4	42.4	42.4	42.4	42.4	42.4	42.4
GE 4000	37.1	40.1	40.6	41.2	41.8	42.1	42.1	42.2	42.4	42.5	42.5	42.6	42.6	42.6	42.6	42.6	42.6	42.6
GE 3000	42.9	46.2	46.7	47.4	47.9	48.2	48.3	48.3	48.5	48.6	48.6	48.7	48.7	48.7	48.7	48.7	48.7	48.8
GE 2000	44.5	47.9	48.4	49.0	49.6	49.9	49.9	50.0	50.2	50.3	50.3	50.4	50.4	50.4	50.4	50.4	50.4	50.4
GE 1000	46.4	49.9	50.3	51.0	51.6	51.9	51.9	52.0	52.2	52.3	52.3	52.4	52.4	52.4	52.4	52.4	52.4	52.4
GE 0000	60.0	67.2	67.9	69.0	69.9	70.3	70.5	70.5	70.8	70.9	71.0	71.1	71.1	71.1	71.2	71.2	71.2	71.3
GE 0000	64.1	69.5	70.2	71.3	72.3	72.7	72.8	72.9	73.2	73.3	73.3	73.5	73.5	73.5	73.6	73.6	73.6	73.6
GE 1000	65.1	70.8	71.5	72.7	73.6	74.0	74.2	74.2	74.6	74.6	74.7	74.8	74.8	74.8	74.9	74.9	75.0	75.0
GE 1000	67.1	73.1	73.8	75.0	75.9	76.3	76.6	76.6	77.0	77.1	77.1	77.3	77.3	77.3	77.3	77.3	77.3	77.5
GE 1000	77.7	85.8	86.9	88.5	90.3	91.0	91.4	92.0	92.7	93.0	93.4	93.6	93.8	93.9	93.9	93.9	94.0	94.0
GE 1000	79.7	87.2	88.5	90.5	92.0	92.7	93.2	93.8	94.5	95.0	95.2	95.4	95.6	95.7	95.7	95.7	95.8	95.8
GE 0000	79.7	87.2	88.5	91.3	92.3	93.5	94.0	94.5	95.3	95.8	96.0	96.2	96.4	96.5	96.5	96.5	96.7	96.7
GE 0000	79.3	86.0	87.4	91.8	93.3	94.0	94.5	95.1	95.9	96.4	96.6	96.8	97.0	97.2	97.2	97.2	97.3	97.3
GE 0000	77.6	83.7	85.0	92.7	94.3	95.0	95.5	96.1	96.9	97.5	97.7	97.9	98.1	98.2	98.2	98.2	98.3	98.3
GE 0000	79.6	86.8	88.4	92.9	94.5	95.3	95.8	96.4	97.2	97.8	98.0	98.2	98.4	98.5	98.5	98.5	98.6	98.6
GE 0000	77.7	84.9	86.5	93.0	94.6	95.5	96.0	96.6	97.4	98.0	98.2	98.5	98.7	98.8	98.8	98.8	98.9	98.9
GE 0000	77.7	85.0	86.5	93.3	94.9	95.8	96.3	96.9	97.7	98.3	98.5	98.8	99.0	99.1	99.1	99.1	99.2	99.2
GE 0000	77.7	85.0	86.5	93.3	94.9	95.8	96.3	96.9	97.7	98.4	98.6	98.8	99.0	99.1	99.1	99.1	99.3	99.3
GE 0000	77.7	85.1	86.7	93.3	95.0	95.9	96.3	97.0	97.8	98.5	98.7	98.9	99.3	99.5	99.5	99.5	99.6	99.6
GE 0000	77.7	85.1	86.7	93.3	95.0	95.9	96.3	97.0	97.8	98.5	98.7	98.9	99.3	99.5	99.5	99.5	99.6	99.6
GE 0000	77.7	85.1	86.7	93.3	95.0	95.9	96.4	97.0	97.8	98.5	98.7	99.0	99.3	99.5	99.6	99.6	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 2401

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUN HOURS (LST): 0000-0200

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 1	GE 2	GE 3	GE 4	GE 5	GE 6	GE 7	GE 8	GE 9	GE 10	GE 12	GE 14	GE 16	GE 18	GE 20	GE 25
NO CLIL	25.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8
GE 20000	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
GE 18000	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
GE 16000	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
GE 14000	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
GE 12000	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
GE 10000	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
GE 9000	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
GE 8000	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
GE 7000	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
GE 6000	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
GE 5000	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
GE 4500	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
GE 4000	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4
GE 3500	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9
GE 3000	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9
GE 2500	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
GE 2000	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4
GE 1800	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1
GE 1600	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
GE 1400	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5
GE 1200	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
GE 1000	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
GE 900	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6
GE 800	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
GE 700	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
GE 600	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6
GE 500	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3
GE 450	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
GE 400	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1
GE 350	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5
GE 300	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
GE 250	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9
GE 200	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3
GE 150	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6
GE 100	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9
GE 50	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2
GE 0	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8

TOTAL NUMBER OF OBSERVATIONS: 291

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 76-87
MONTH: JUN HOURS(IST): 0300-0500

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS																	
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30	40
NO CEIL	21.4	22.6	23.8	23.1	23.6	24.1	24.1	24.1	24.1	24.1	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
GE 2000	24.1	25.2	26.2	26.6	27.2	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.9	27.9	27.9
GE 1800	24.1	26.2	26.2	26.6	27.2	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.9	27.9	27.9
GE 1600	24.1	26.2	26.2	26.6	27.2	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.9	27.9	27.9
GE 1400	24.1	26.2	26.2	26.6	27.2	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.9	27.9	27.9
GE 1200	24.1	26.2	26.2	26.6	27.2	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.9	27.9	27.9
GE 1000	35.5	36.6	38.6	39.3	40.3	40.7	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.4	41.4	41.4
GE 900	35.5	36.6	38.6	39.3	40.3	40.7	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.4	41.4	41.4
GE 800	35.5	36.6	38.6	39.3	40.3	40.7	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.4	41.4	41.4
GE 700	35.5	36.6	38.6	39.3	40.3	40.7	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.4	41.4	41.4
GE 600	35.5	36.6	38.6	39.3	40.3	40.7	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.4	41.4	41.4
GE 500	36.2	39.3	39.3	40.0	41.0	41.4	41.4	41.7	41.7	41.7	41.7	42.1	42.1	42.1	42.1	42.1	42.1	42.1
GE 400	36.7	39.7	39.7	40.3	41.4	41.7	41.7	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.4	42.4	42.4
GE 300	40.1	43.2	43.2	43.9	46.9	47.2	47.2	47.6	47.6	47.6	47.6	47.9	47.9	47.9	47.9	47.9	47.9	47.9
GE 200	43.1	46.2	46.2	46.9	47.9	48.3	48.3	48.6	48.6	48.6	48.6	49.0	49.0	49.0	49.0	49.0	49.0	49.0
GE 100	45.9	49.6	49.6	49.3	50.3	50.7	50.7	51.0	51.0	51.0	51.0	51.4	51.4	51.4	51.4	51.4	51.4	51.4
GE 000	61.7	65.6	66.6	67.2	68.3	68.6	69.0	69.3	69.3	69.3	69.3	69.7	69.7	69.7	69.7	69.7	69.7	69.7
GE 000	65.2	70.3	71.3	71.3	72.1	72.4	72.8	73.1	73.1	73.1	73.1	73.4	73.4	73.4	73.4	73.4	73.4	73.4
GE 000	65.9	71.3	71.3	71.7	72.5	73.1	73.4	73.8	73.8	73.8	73.8	74.1	74.1	74.1	74.1	74.1	74.1	74.1
GE 000	68.2	71.4	71.4	72.1	73.1	73.4	73.8	74.1	74.1	74.1	74.1	74.5	74.5	74.5	74.5	74.5	74.5	74.5
GE 000	74.1	81.5	81.7	83.1	84.3	86.2	86.6	86.9	87.2	87.2	87.2	88.3	88.3	88.3	88.3	88.3	88.3	88.3
GE 000	74.8	82.4	83.1	84.5	86.2	87.9	88.3	88.6	89.0	89.3	89.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
GE 000	76.9	84.5	85.2	86.6	88.3	90.0	90.3	90.7	91.0	91.0	91.0	91.4	91.4	91.4	91.4	91.4	91.4	91.4
GE 000	78.9	84.5	85.2	86.6	88.3	90.0	90.3	90.7	91.0	91.0	91.0	91.4	91.4	91.4	91.4	91.4	91.4	91.4
GE 000	77.2	85.9	86.6	87.9	89.7	92.8	93.1	93.4	93.9	94.5	94.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
GE 000	77.2	85.2	87.2	87.7	91.4	93.4	93.8	94.1	94.5	95.2	95.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
GE 000	77.2	85.6	87.9	90.3	92.1	94.1	94.5	95.2	95.5	96.2	96.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
GE 000	77.2	86.6	87.9	91.7	92.5	95.2	95.9	96.9	97.6	98.3	98.3	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 000	77.2	86.6	87.9	92.7	92.5	95.2	95.9	96.9	97.6	98.3	98.3	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 000	77.2	86.6	87.9	92.7	92.5	95.2	95.9	96.9	97.6	98.3	98.3	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 000	77.2	86.6	87.9	92.7	92.5	95.2	95.9	96.9	97.6	98.3	98.3	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 000	77.2	86.6	87.9	92.7	92.5	95.2	95.9	96.9	97.6	98.3	98.3	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 000	77.2	86.6	87.9	92.7	92.5	95.2	95.9	96.9	97.6	98.3	98.3	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 000	77.2	86.6	87.9	92.7	92.5	95.2	95.9	96.9	97.6	98.3	98.3	99.7	99.7	99.7	99.7	99.7	99.7	99.7

TOTAL NUMBER OF OBSERVATIONS: 230

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87
MONTH: JUN HOURS (LST): 0600-0800

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 207

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 201137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87

MONTH: JUN HOURS (LST): 0900-1100

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 100	GE 90	GE 80	GE 70	GE 60	GE 50	GE 40	GE 30	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4
NO CEIL	17.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
GE 20000	20.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
GE 18000	20.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
GE 16000	20.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
GE 14000	20.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
GE 12000	20.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
GE 10000	31.8	34.2	34.2	34.2	35.3	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
GE 9000	31.8	34.2	34.2	34.2	35.3	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
GE 8000	31.8	34.2	34.2	34.2	35.3	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
GE 7000	31.8	34.2	34.2	34.2	35.3	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
GE 6000	31.8	34.2	34.2	34.2	35.3	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
GE 5000	32.2	34.6	34.6	34.6	35.6	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
GE 4000	32.9	35.3	35.3	35.3	36.3	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
GE 3000	36.0	36.4	36.4	36.4	39.7	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
GE 2000	36.3	36.7	36.7	36.7	39.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4
GE 1000	36.4	40.8	41.1	41.4	42.1	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
GE 800	59.6	61.0	61.7	61.7	64.7	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4
GE 700	61.6	65.8	66.4	66.6	67.5	68.2	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5
GE 600	62.7	66.4	67.1	67.5	68.2	68.8	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2
GE 500	64.4	64.8	67.5	69.7	71.5	71.2	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
GE 400	70.4	71.2	73.4	74.9	77.0	78.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
GE 300	74.8	76.3	77.0	78.0	80.4	81.4	82.1	82.5	83.2	83.5	83.5	83.5	83.5	83.5	83.5	83.5
GE 200	77.5	77.7	78.4	79.4	81.4	83.2	83.8	84.2	84.9	85.2	85.2	85.2	85.2	85.2	85.2	85.2
GE 100	79.5	77.7	78.7	79.4	82.4	84.2	84.9	85.2	86.2	86.9	87.3	87.3	87.3	87.3	87.3	87.3
GE 80	79.5	81.0	82.0	81.1	83.8	85.2	85.9	86.6	87.6	88.3	88.3	88.3	88.3	88.3	88.3	88.3
GE 60	79.5	84.0	84.0	81.1	83.8	85.2	85.2	86.9	88.3	89.0	89.0	89.0	89.0	89.0	89.0	89.0
GE 40	79.5	84.0	84.0	81.1	83.8	85.2	85.2	86.9	88.3	89.0	89.0	89.0	89.0	89.0	89.0	89.0
GE 20	79.5	84.0	84.0	81.1	83.8	85.2	85.2	86.9	88.3	89.0	89.0	89.0	89.0	89.0	89.0	89.0
GE 10	79.5	84.0	84.0	81.1	83.8	85.2	85.2	86.9	88.3	89.0	89.0	89.0	89.0	89.0	89.0	89.0

TOTAL NUMBER OF OBSERVATIONS: 242

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 20133 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUN HOURS(EST): 1200-1400

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO CEIL	16.3	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
GE 20000	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
GE 18000	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
GE 16000	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
GE 14000	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
GE 12000	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
GE 10000	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
GE 9000	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
GE 8000	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
GE 7000	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
GE 6000	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
GE 5000	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
GE 4000	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
GE 3000	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4
GE 2000	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
GE 1800	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
GE 1600	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4
GE 1400	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8
GE 1200	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
GE 1000	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
GE 900	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
GE 800	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8
GE 700	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
GE 600	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
GE 500	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 400	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 300	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 264

GLOBAL CLIMATOLOGY BRANCH
USAF/CLTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271130 STATION NAME: MURMANSK USSR

PERIOD OF MONTH: JAN 1967
HOURS (LST): 1500-1700

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO CEIL	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
GE 20000	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1
GE 18000	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1
GE 16000	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1
GE 14000	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1
GE 12000	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1
GE 10000	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8
GE 9000	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8
GE 8000	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8
GE 7000	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8
GE 6000	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8
GE 5000	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8
GE 4500	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
GE 4000	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
GE 3500	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8
GE 3000	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9
GE 2500	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
GE 2000	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
GE 1500	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
GE 1000	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9
GE 900	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
GE 800	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
GE 700	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
GE 600	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
GE 500	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 400	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 300	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 290

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 76-87
MONTH: JUL HOURS(EST): 1800-2000

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 295

GLOBAL CLIMATOLOGY BRANCH
USAF/CIAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201100 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUN HOURS(IST): 2100-2300

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS																	
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30	40
NO CEIL	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2
GE 20000	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
GE 18000	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
GE 16000	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
GE 14000	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
GE 12000	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
GE 10000	39.9	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
GE 9000	39.9	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
GE 8000	39.9	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
GE 7000	39.9	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
GE 6000	40.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
GE 5000	40.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6
GE 4500	41.6	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
GE 4000	49.8	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2
GE 3500	49.6	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9
GE 3000	50.9	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2
GE 2500	67.9	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
GE 2000	70.0	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4
GE 1800	70.0	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
GE 1600	74.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
GE 1400	85.0	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1
GE 1200	86.7	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8
GE 1000	87.4	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
GE 900	87.7	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
GE 800	87.7	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
GE 700	87.7	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
GE 600	87.7	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
GE 500	87.7	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
GE 400	87.7	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
GE 300	87.7	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
GE 200	87.7	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
GE 100	87.7	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6

TOTAL NUMBER OF OBSERVATIONS: 293

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAL

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUN HOURS(EST): ALL

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 100	GE 40	GE 30	GE 20	GE 15	GE 10	GE 8	GE 6	GE 4	GE 3	GE 2	GE 1	GE 0	GE 0	GE 0	GE 0
NO CEIL	20.5	21.2	21.2	21.3	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4
GE 20000	23.5	24.4	24.4	24.5	24.5	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6
GE 18000	23.5	24.4	24.4	24.5	24.5	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6
GE 16000	23.5	24.4	24.4	24.5	24.5	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6
GE 14000	23.5	24.4	24.4	24.5	24.5	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6
GE 12000	23.5	24.4	24.4	24.5	24.5	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6
GE 10000	35.6	37.4	37.5	37.7	38.0	38.1	38.1	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2
GE 9000	35.6	37.4	37.5	37.7	38.0	38.1	38.1	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2
GE 8000	35.6	37.4	37.5	37.7	38.0	38.1	38.1	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2
GE 7000	35.6	37.4	37.5	37.7	38.0	38.1	38.1	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2
GE 6000	35.7	37.5	37.6	37.8	38.1	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2
GE 5000	38.3	39.1	39.2	39.4	39.7	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8
GE 4500	38.7	39.5	39.6	39.8	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9
GE 4000	42.1	44.1	44.3	44.5	44.8	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
GE 3500	43.6	45.7	45.8	46.0	46.3	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
GE 3000	45.3	47.5	47.7	47.9	48.2	48.4	48.4	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5
GE 2500	65.1	68.2	68.5	69.0	69.4	69.6	69.7	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8
GE 2000	67.3	70.6	70.8	71.3	71.7	71.9	72.1	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2
GE 1800	68.2	71.6	71.9	72.4	72.8	73.0	73.1	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2
GE 1600	69.7	73.1	73.4	73.9	74.3	74.5	74.7	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
GE 1400	80.1	85.9	86.5	87.7	88.8	89.3	89.7	90.3	90.7	91.0	91.2	91.3	91.4	91.4	91.4	91.4
GE 1200	81.2	87.8	88.4	89.8	91.0	91.6	92.0	92.6	93.1	93.4	93.6	93.7	93.8	93.9	93.9	93.9
GE 1000	82.0	88.7	89.4	90.9	92.1	92.8	93.2	93.8	94.3	94.6	94.8	94.9	95.1	95.1	95.1	95.1
GE 900	82.1	89.1	89.8	91.3	92.6	93.3	93.8	94.4	94.9	95.3	95.5	95.6	95.7	95.7	95.7	95.7
GE 800	82.6	90.1	91.0	92.7	94.4	95.2	95.6	96.2	96.9	97.2	97.5	97.6	97.7	97.7	97.7	97.7
GE 700	82.7	90.5	91.4	93.0	95.1	95.9	96.3	97.0	97.6	98.0	98.2	98.3	98.5	98.5	98.5	98.5
GE 600	82.7	90.6	91.5	93.4	95.4	96.2	96.7	97.5	98.1	98.5	98.7	98.8	98.9	99.0	99.0	99.0
GE 500	82.7	90.6	91.5	93.4	95.4	96.2	96.7	97.5	98.1	98.5	98.7	98.8	98.9	99.0	99.0	99.0
GE 400	82.7	90.6	91.5	93.4	95.4	96.2	96.7	97.5	98.1	98.5	98.7	98.8	98.9	99.0	99.0	99.0
GE 300	82.7	90.6	91.5	93.4	95.4	96.2	96.7	97.5	98.1	98.5	98.7	98.8	98.9	99.0	99.0	99.0
GE 200	82.7	90.6	91.5	93.4	95.4	96.2	96.7	97.5	98.1	98.5	98.7	98.8	98.9	99.0	99.0	99.0
GE 100	82.7	90.6	91.5	93.4	95.4	96.2	96.7	97.5	98.1	98.5	98.7	98.8	98.9	99.0	99.0	99.0
GE 0	82.7	90.6	91.5	93.4	95.4	96.2	96.7	97.5	98.1	98.5	98.7	98.8	98.9	99.0	99.0	99.0

TOTAL NUMBER OF OBSERVATIONS: 2727

GLOBAL CLIMATOLOGY BRANCH
LSAFLTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221120 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL HOURS(LST): 0000-0200

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	160	GE 90	GE 40	GE 60	GE 45	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4
NO CEIL	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6
GE 20000	26.6	26.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
GE 18000	26.6	26.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
GE 16000	26.6	26.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
GE 14000	26.6	26.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
GE 12000	26.6	26.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
GE 10000	39.5	42.1	42.4	42.6	42.6	42.8	42.8	42.8	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1
GE 9000	39.5	42.1	42.4	42.6	42.6	42.8	42.8	42.8	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1
GE 8000	39.5	42.1	42.4	42.6	42.6	42.8	42.8	42.8	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1
GE 7000	39.5	42.1	42.4	42.6	42.6	42.8	42.8	42.8	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1
GE 6000	39.5	42.1	42.4	42.6	42.6	42.8	42.8	42.8	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1
GE 5000	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1
GE 4500	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1
GE 4000	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1
GE 3500	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1
GE 3000	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1
GE 2500	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 2000	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 1800	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 1600	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 1400	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 1200	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 1000	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 900	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 800	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 700	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 600	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 500	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 400	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 300	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 200	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
GE 100	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5

TOTAL NUMBER OF OBSERVATIONS: 304

CLIMATOLOGY BRANCH
USAFITAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL HOURS(IST): 0300-0500

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1 160	2 200	3 250	4 300	5 350	6 400	7 450	8 500	9 550	10 600	11 650	12 700	13 750	14 800	15 850	16 900
NO CEIL	22.2	24.6	24.9	25.2	25.6	26.2	26.2	26.2	26.5	26.9	27.2	27.2	27.2	27.2	27.2	27.2
GE 2000	23.3	26.5	26.9	27.2	27.5	28.2	28.2	28.2	28.5	28.8	28.8	29.1	29.1	29.1	29.1	29.1
GE 1800	27.3	26.9	26.9	27.2	27.5	28.2	28.2	28.2	28.5	28.8	28.8	29.1	29.1	29.1	29.1	29.1
GE 1600	23.3	26.5	26.9	27.2	27.5	28.2	28.2	28.2	28.5	28.8	28.8	29.1	29.1	29.1	29.1	29.1
GE 1400	27.3	26.5	26.9	27.2	27.5	28.2	28.2	28.2	28.5	28.8	28.8	29.1	29.1	29.1	29.1	29.1
GE 1200	23.3	26.5	26.9	27.2	27.5	28.2	28.2	28.2	28.5	28.8	28.8	29.1	29.1	29.1	29.1	29.1
GE 1000	30.4	35.3	35.6	36.2	36.6	37.2	37.5	37.5	37.9	38.2	38.2	38.5	38.5	38.5	38.5	38.5
GE 900	30.4	35.3	35.6	36.2	36.6	37.2	37.5	37.5	37.9	38.2	38.2	38.5	38.5	38.5	38.5	38.5
GE 800	30.4	35.3	35.6	36.2	36.6	37.2	37.5	37.5	37.9	38.2	38.2	38.5	38.5	38.5	38.5	38.5
GE 700	30.4	35.3	35.6	36.2	36.6	37.2	37.5	37.5	37.9	38.2	38.2	38.5	38.5	38.5	38.5	38.5
GE 600	30.4	35.3	35.6	36.2	36.6	37.2	37.5	37.5	37.9	38.2	38.2	38.5	38.5	38.5	38.5	38.5
GE 500	32.0	36.9	37.2	37.9	38.2	38.8	39.2	39.2	39.5	39.8	39.8	40.1	40.1	40.1	40.1	40.1
GE 450	32.7	37.5	37.9	38.5	38.8	39.5	39.8	39.8	40.1	40.5	40.5	40.8	40.8	40.8	40.8	40.8
GE 400	41.1	46.6	46.9	47.6	47.9	48.9	49.2	49.2	49.5	49.8	49.8	50.2	50.2	50.2	50.2	50.2
GE 350	41.4	46.9	47.2	47.9	48.2	49.2	49.5	49.5	49.8	50.2	50.2	50.5	50.5	50.5	50.5	50.5
GE 300	41.7	47.2	47.6	48.2	48.5	49.5	49.8	49.8	50.2	50.5	50.5	50.8	50.8	50.8	50.8	50.8
GE 250	53.4	61.2	61.5	62.1	62.8	63.8	64.1	64.1	64.4	64.7	64.7	65.0	65.0	65.0	65.0	65.0
GE 200	55.3	63.4	63.8	64.4	65.0	66.0	66.3	66.3	66.7	67.0	67.0	67.3	67.3	67.3	67.3	67.3
GE 180	55.7	63.8	64.1	64.7	65.4	66.3	66.7	66.7	67.0	67.3	67.3	67.6	67.6	67.6	67.6	67.6
GE 160	57.6	65.7	66.0	67.0	67.6	68.6	68.9	68.9	69.3	69.6	69.6	69.9	69.9	69.9	69.9	69.9
GE 140	66.3	76.7	77.7	78.6	79.3	80.3	80.9	80.9	81.2	81.6	81.6	81.9	81.9	81.9	81.9	81.9
GE 120	68.9	79.6	80.6	81.9	82.5	84.1	84.8	85.1	85.4	85.8	85.8	86.1	86.1	86.1	86.1	86.1
GE 100	70.2	81.5	83.2	84.5	85.1	87.1	87.7	88.0	88.3	88.7	88.7	89.0	89.0	89.0	89.0	89.0
GE 80	71.2	82.9	84.1	85.5	86.4	88.3	89.0	89.3	89.6	90.0	90.0	90.3	90.3	90.3	90.3	90.3
GE 70	71.6	84.5	86.4	88.3	89.3	91.3	91.9	92.6	92.9	93.2	93.2	93.5	93.5	93.5	93.5	93.5
GE 60	71.9	84.5	86.4	88.3	89.3	91.6	92.2	92.9	93.2	93.5	93.5	93.9	93.9	93.9	93.9	93.9
GE 50	72.2	85.4	87.4	89.6	90.6	92.9	93.5	94.2	94.5	95.5	95.5	95.8	95.8	95.8	95.8	95.8
GE 40	72.5	85.8	87.7	90.3	91.6	94.2	95.5	96.4	97.1	98.1	98.1	98.4	98.4	98.4	98.4	98.4
GE 30	72.5	85.8	87.7	90.3	91.6	94.2	95.5	96.4	97.1	98.4	98.4	98.7	98.7	98.7	98.7	98.7
GE 20	72.5	85.8	87.7	90.3	91.6	94.2	95.5	96.4	97.4	98.7	98.7	99.0	99.0	99.4	99.4	99.4
GE 10	72.5	85.8	87.7	90.3	91.6	94.2	95.5	96.4	97.4	98.7	98.7	99.0	99.0	99.4	99.4	100.0

TOTAL NUMBER OF OBSERVATIONS: 300

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VISIBS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: KURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL HOURS(IST): 0600-0800

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS																
	1	2	3	4	5	6	7	8	9	10	12	15	20	25	30	40	50
NO CEIL	21.4	24.0	24.0	25.0	25.3	25.7	25.7	26.0	26.0	26.2	26.3	26.3	26.3	26.3	26.3	26.3	26.6
GE 20000	22.4	25.0	25.3	26.3	26.6	27.0	27.0	27.3	27.3	27.6	27.6	27.6	27.6	27.6	27.6	27.6	28.0
GE 18000	22.4	25.0	25.3	26.3	26.6	27.0	27.0	27.3	27.3	27.6	27.6	27.6	27.6	27.6	27.6	27.6	28.0
GE 16000	22.4	25.0	25.3	26.3	26.6	27.0	27.0	27.3	27.3	27.6	27.6	27.6	27.6	27.6	27.6	27.6	28.0
GE 14000	22.4	25.0	25.3	26.3	26.6	27.0	27.0	27.3	27.3	27.6	27.6	27.6	27.6	27.6	27.6	27.6	28.0
GE 12000	22.4	25.0	25.3	26.3	26.6	27.0	27.0	27.3	27.3	27.6	27.6	27.6	27.6	27.6	27.6	27.6	28.0
GE 10000	31.6	35.2	36.2	37.2	37.5	38.2	38.2	38.5	38.8	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.5
GE 9000	31.6	35.2	36.2	37.2	37.5	38.2	38.2	38.5	38.8	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.5
GE 8000	31.6	35.2	36.2	37.2	37.5	38.2	38.2	38.5	38.8	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.5
GE 7000	31.6	35.2	36.2	37.2	37.5	38.2	38.2	38.5	38.8	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.5
GE 6000	31.6	35.2	36.2	37.2	37.5	38.2	38.2	38.5	38.8	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.5
GE 5000	31.9	35.5	36.5	37.5	37.8	38.5	38.5	38.8	39.1	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.8
GE 4500	31.9	35.5	36.5	37.5	37.8	38.5	38.5	38.8	39.1	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.8
GE 4000	38.8	43.1	44.1	45.1	45.4	46.1	46.1	46.4	46.7	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.4
GE 3500	39.5	43.8	44.7	45.7	46.1	46.7	46.7	47.0	47.4	47.7	47.7	47.7	47.7	47.7	47.7	47.7	48.0
GE 3000	39.5	43.8	44.7	45.7	46.1	46.7	46.7	47.0	47.4	47.7	47.7	47.7	47.7	47.7	47.7	47.7	48.0
GE 2500	49.7	55.9	56.9	57.9	58.2	59.2	59.2	59.5	59.9	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.5
GE 2000	51.6	55.2	56.2	57.2	57.5	58.2	58.2	58.5	58.8	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.5
GE 1800	52.3	55.9	56.9	57.9	58.2	59.2	59.2	59.5	59.9	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.5
GE 1600	53.6	57.5	58.5	59.5	59.8	60.2	60.2	60.5	60.8	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.5
GE 1400	66.8	74.0	75.0	76.0	77.3	78.6	78.6	78.9	79.3	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.9
GE 1200	67.1	77.6	78.6	79.6	80.3	80.9	82.6	82.6	82.9	83.2	83.6	83.6	83.6	83.6	83.6	83.6	83.9
GE 1000	69.8	79.9	81.2	82.7	83.6	85.2	85.2	85.5	85.9	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.5
GE 900	70.1	81.9	83.6	85.2	85.7	87.5	87.5	87.8	88.5	88.8	88.8	88.8	88.8	88.8	88.8	88.8	89.1
GE 800	71.7	83.9	85.9	87.5	89.1	90.8	90.8	91.4	92.1	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.8
GE 700	72.0	84.5	86.5	88.2	89.8	91.4	91.4	92.1	92.8	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.4
GE 600	72.4	85.2	87.2	89.3	90.5	92.1	92.1	92.8	93.4	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.4
GE 500	72.7	85.5	87.6	89.9	91.1	92.4	92.4	93.8	94.7	95.7	96.4	96.4	96.4	96.4	96.4	96.4	96.7
GE 400	72.7	85.5	87.6	89.9	91.1	92.4	92.4	93.8	94.7	95.7	96.4	96.4	96.4	96.4	96.4	96.4	96.7
GE 300	72.7	85.5	87.6	89.9	91.1	92.4	92.4	93.8	94.7	95.7	96.4	96.4	96.4	96.4	96.4	96.4	96.7
GE 200	72.7	85.5	87.6	89.9	91.1	92.4	92.4	93.8	94.7	95.7	96.4	96.4	96.4	96.4	96.4	96.4	96.7
GE 100	72.7	85.5	87.6	89.9	91.1	92.4	92.4	93.8	94.7	95.7	96.4	96.4	96.4	96.4	96.4	96.4	96.7
GE 0	72.7	85.5	87.6	89.9	91.1	92.4	92.4	93.8	94.7	95.7	96.4	96.4	96.4	96.4	96.4	96.4	100.0

TOTAL NUMBER OF OBSERVATIONS: 304

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221127 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 7-67
MONTH: JUL HOURS(EST): 0900-1100

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO CEIL	22.2	24.5	24.8	25.2	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
GE 20000	25.2	27.5	27.8	28.1	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
GE 18000	25.2	27.5	27.8	28.1	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
GE 16000	25.2	27.5	27.8	28.1	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
GE 14000	25.2	27.5	27.8	28.1	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
GE 12000	25.2	27.5	27.8	28.1	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
GE 10000	35.8	39.4	40.1	40.7	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 9000	35.8	39.4	40.1	40.7	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 8000	35.8	39.4	40.1	40.7	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 7000	35.8	39.4	40.1	40.7	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 6000	35.8	39.4	40.1	40.7	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 5000	36.1	39.7	40.4	41.1	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4
GE 4000	36.1	39.7	40.4	41.1	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4
GE 3000	39.4	42.1	42.7	43.4	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7
GE 2000	39.4	42.1	42.7	43.4	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7
GE 1000	39.4	42.7	43.4	44.1	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4
GE 500	51.2	55.6	56.3	57.0	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
GE 400	54.7	58.9	59.6	60.3	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
GE 300	54.7	58.9	59.6	60.3	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
GE 200	57.9	61.9	62.6	63.3	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7
GE 100	72.5	76.1	76.8	77.5	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9
GE 50	75.8	79.4	80.1	80.7	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1
GE 40	76.5	80.1	80.7	81.1	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4
GE 30	76.8	80.4	81.1	81.4	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7
GE 20	78.5	82.1	82.7	83.4	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
GE 10	78.5	82.7	83.4	84.1	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
GE 5	78.5	82.7	83.4	84.1	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
GE 1	78.5	82.7	83.4	84.1	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
GE 0	78.5	82.7	83.4	84.1	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4

TOTAL NUMBER OF OBSERVATIONS: 732

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 74-87
MONTH: JUL HOURS(IST): 1200-1400

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 90	GE 80	GE 60	GE 48	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	25.0	25.3	25.3	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7
GE 20000	27.0	27.3	27.3	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
GE 18000	27.0	27.3	27.3	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
GE 16000	27.0	27.3	27.3	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
GE 14000	27.0	27.3	27.3	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
GE 12000	27.0	27.3	27.3	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
GE 10000	39.7	39.7	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 9000	39.0	39.7	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 8000	39.0	39.7	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 7000	39.0	39.7	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 6000	39.0	39.7	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 5000	39.3	40.0	40.0	40.3	40.3	40.3	40.3	40.3	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
GE 4500	40.0	40.7	40.7	41.0	41.0	41.0	41.0	41.0	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
GE 4000	40.7	40.7	40.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 3500	40.7	40.0	40.0	40.3	40.3	40.3	40.3	40.3	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
GE 3000	40.0	40.0	40.0	40.3	40.3	40.3	40.3	40.3	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
GE 2500	66.7	63.0	68.0	68.3	68.3	68.3	68.3	68.3	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
GE 2000	67.7	71.0	71.0	71.3	71.3	71.3	71.3	71.3	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
GE 1800	71.0	72.3	72.3	72.7	72.7	72.7	72.7	72.7	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
GE 1600	72.7	74.3	74.3	74.7	74.7	74.7	74.7	74.7	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
GE 1400	85.7	89.7	90.0	90.7	91.0	91.3	91.3	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
GE 1200	87.0	90.0	93.0	93.7	94.0	94.3	94.7	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
GE 1000	87.7	90.0	93.7	95.0	95.3	95.7	96.0	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 900	88.3	93.7	94.3	95.7	96.0	96.3	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 800	88.7	94.7	95.3	97.0	97.3	97.7	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
GE 700	89.3	95.3	96.0	97.7	98.0	98.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 600	89.3	95.3	96.0	97.7	98.0	98.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 500	89.3	95.3	96.0	97.7	98.0	98.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 400	89.3	95.3	96.0	97.7	98.0	98.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 300	89.3	95.3	96.0	97.7	98.0	98.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 200	89.3	95.3	96.0	97.7	98.0	98.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 100	89.3	95.3	96.0	97.7	98.0	98.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 0	89.3	95.3	96.0	97.7	98.0	98.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS: 700

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 74-87
MONTH: JUL HOURS(EST): 1500-1700

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS																
	GE 100	GE 90	GE 80	GE 70	GE 60	GE 50	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
GE 2000	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
GE 1800	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
GE 1600	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
GE 1400	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
GE 1200	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
GE 1000	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
GE 900	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
GE 800	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
GE 700	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
GE 600	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
GE 500	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9
GE 450	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
GE 400	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
GE 350	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5
GE 300	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9
GE 250	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
GE 200	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
GE 180	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
GE 160	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
GE 140	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
GE 120	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1
GE 100	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
GE 90	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
GE 80	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
GE 70	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
GE 60	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
GE 50	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
GE 40	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
GE 30	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
GE 20	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
GE 10	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
GE 0	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1

TOTAL NUMBER OF OBSERVATIONS: 722

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87
MONTH: JUL HOURS(LST): 1800-2000

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 302

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87

MONTH: JUL HOURS(IST): 2100-2300

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 1	GE 2	GE 3	GE 4	GE 5	GE 6	GE 7	GE 8	GE 9	GE 10	GE 12	GE 14	GE 16	GE 18	GE 20	GE 25
NO CEIL	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4
GE 2100	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
GE 1800	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
GE 1600	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
GE 1400	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
GE 1200	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
GE 1000	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8
GE 900	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8
GE 800	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8
GE 700	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8
GE 600	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8
GE 500	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
GE 400	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
GE 300	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8
GE 200	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8
GE 100	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9
GE 0	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2
GE 1000	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
GE 900	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
GE 800	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
GE 700	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
GE 600	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
GE 500	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 400	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 300	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 200	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 100	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 0	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 1000	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 900	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 800	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 700	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 600	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 500	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 400	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 300	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 200	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 100	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 0	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6

TOTAL NUMBER OF OBSERVATIONS: 299

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL HOURS(LST): ALL

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN	GT	GE	GF	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
FEET	100	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200
NO CEIL	27.7	26.5	26.0	26.9	27.0	27.1	27.1	27.2	27.2	27.3	27.3	27.4	27.4	27.4	27.4	27.4	27.4
GE 20000	27.4	28.6	28.4	29.1	29.2	29.3	29.3	29.4	29.4	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
GE 18000	27.4	28.6	28.4	29.1	29.2	29.3	29.3	29.4	29.4	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
GE 16000	27.4	28.6	28.4	29.1	29.2	29.3	29.3	29.4	29.4	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
GE 14000	27.4	28.6	28.4	29.1	29.2	29.3	29.3	29.4	29.4	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
GE 12000	27.4	28.6	28.4	29.1	29.2	29.3	29.3	29.4	29.4	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
GE 10000	37.6	39.6	39.9	40.3	40.4	40.6	40.6	40.7	40.8	40.9	40.9	41.0	41.0	41.0	41.0	41.0	41.0
GE 9000	37.6	39.6	39.9	40.3	40.4	40.6	40.6	40.7	40.8	40.9	40.9	41.0	41.0	41.0	41.0	41.0	41.0
GE 8000	37.6	39.6	39.9	40.3	40.4	40.6	40.6	40.7	40.8	40.9	40.9	41.0	41.0	41.0	41.0	41.0	41.0
GE 7000	37.6	39.6	39.9	40.3	40.4	40.6	40.6	40.7	40.8	40.9	40.9	41.0	41.0	41.0	41.0	41.0	41.0
GE 6000	37.6	39.6	39.9	40.3	40.4	40.6	40.6	40.7	40.8	40.9	40.9	41.0	41.0	41.0	41.0	41.0	41.0
GE 5000	38.7	40.2	40.4	40.9	41.1	41.2	41.3	41.3	41.5	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.7
GE 4500	38.6	40.0	40.4	41.3	41.4	41.6	41.6	41.6	41.9	41.9	41.9	42.0	42.0	42.0	42.0	42.0	42.0
GE 4000	44.7	46.9	47.3	47.6	47.8	48.0	48.0	48.1	48.2	48.4	48.4	48.4	48.4	48.4	48.4	48.5	48.5
GE 3500	45.1	47.3	47.7	48.0	48.2	48.4	48.4	48.5	48.7	48.8	48.8	48.8	48.8	48.8	48.8	48.9	48.9
GE 3000	45.8	48.1	48.4	48.8	48.9	49.1	49.2	49.2	49.4	49.5	49.5	49.6	49.6	49.6	49.6	49.6	49.7
GE 2500	62.3	65.5	65.8	66.2	66.4	66.7	66.7	66.8	67.0	67.1	67.1	67.1	67.1	67.1	67.1	67.2	67.3
GE 2000	64.5	67.8	68.1	68.6	68.8	69.0	69.1	69.2	69.4	69.5	69.5	69.5	69.5	69.5	69.5	69.6	69.7
GE 1800	65.3	68.7	69.0	69.5	69.7	70.0	70.0	70.1	70.3	70.4	70.4	70.5	70.5	70.5	70.5	70.5	70.6
GE 1600	67.0	71.9	71.3	71.8	72.0	72.3	72.3	72.4	72.6	72.8	72.8	72.8	72.8	72.8	72.8	72.9	72.9
GE 1400	72.7	84.6	85.2	86.1	86.4	86.9	87.0	87.2	87.4	87.5	87.5	87.6	87.6	87.6	87.6	87.6	87.7
GE 1200	80.5	87.3	88.0	89.0	89.4	90.1	90.3	90.5	90.7	90.8	90.8	90.9	90.9	90.9	90.9	90.9	91.0
GE 1000	81.4	88.7	89.6	90.7	91.1	92.0	92.1	92.4	92.6	92.7	92.7	92.7	92.7	92.7	92.7	92.8	92.9
GE 900	82.1	89.8	90.8	92.1	92.5	93.4	93.5	93.8	94.0	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.3
GE 800	83.0	91.3	92.4	93.9	94.5	95.3	95.5	95.8	96.1	96.2	96.2	96.3	96.3	96.3	96.3	96.3	96.4
GE 700	83.2	91.7	92.9	94.4	95.1	96.0	96.2	96.6	96.9	97.1	97.1	97.1	97.1	97.1	97.1	97.2	97.2
GE 600	83.3	91.9	93.2	94.8	95.6	96.6	96.9	97.3	97.6	97.9	97.9	97.9	97.9	97.9	97.9	98.0	98.1
GE 500	83.4	92.0	93.4	95.2	96.2	97.3	97.7	98.2	98.7	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.2
GE 400	83.4	92.0	93.5	95.3	96.3	97.4	97.9	98.4	99.0	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.6
GE 300	83.4	92.0	93.5	95.3	96.3	97.4	97.9	98.4	99.1	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6
GE 200	83.4	92.0	93.5	95.3	96.3	97.4	97.9	98.4	99.1	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6
GE 100	83.4	92.0	93.5	95.3	96.3	97.4	97.9	98.4	99.1	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6
GE	83.4	92.0	93.5	95.3	96.3	97.4	97.9	98.4	99.1	99.5	99.5	99.5	99.5	99.5	99.5	99.6	100.0

TOTAL NUMBER OF OBSERVATIONS: 2423

GLOBAL CLIMATOLOGY BRANCH
USAF/ATC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG HOURS(LST): 0000-0200

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN	FEET	GE 100	GE 200	GE 300	GE 400	GE 480	GE 400	GE 320	GE 240	GE 200	GE 160	GE 120	GE 100	GE 80	GE 50	GE 40	GE 0
NO CEIL	19.1	22.4	22.4	22.6	22.8	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1
GE 2000	20.1	24.4	24.4	24.6	24.8	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
GE 1800	20.1	24.4	24.4	24.6	24.8	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
GE 1600	20.1	24.4	24.4	24.6	24.8	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
GE 1400	20.1	24.4	24.4	24.6	24.8	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
GE 1200	20.1	24.4	24.4	24.6	24.8	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
GE 1000	30.0	36.3	36.3	36.6	37.0	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
GE 900	30.0	36.3	36.3	36.6	37.0	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
GE 800	30.0	36.3	36.3	36.6	37.0	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
GE 700	30.0	36.3	36.3	36.6	37.0	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
GE 600	30.0	36.3	36.3	36.6	37.0	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
GE 500	30.7	37.0	37.0	37.3	37.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6
GE 400	31.0	37.3	37.3	38.0	38.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
GE 300	38.0	46.2	46.2	46.9	46.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
GE 200	39.3	46.5	46.5	47.2	47.9	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8
GE 100	40.6	47.9	47.9	48.5	49.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2
GE 2500	61.3	69.3	69.3	70.3	71.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
GE 2000	64.4	72.6	72.6	73.6	74.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6
GE 1800	65.7	73.9	73.9	74.9	75.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
GE 1600	67.0	75.2	75.2	76.2	77.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2
GE 1400	76.2	86.5	86.5	87.6	89.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
GE 1200	77.6	90.1	90.1	91.4	92.1	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
GE 1000	77.6	90.1	90.1	91.4	92.1	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
GE 900	78.2	91.1	91.1	92.4	93.1	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
GE 800	78.2	91.1	91.1	92.4	93.1	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
GE 700	78.2	91.1	91.1	92.4	93.1	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
GE 600	79.5	92.4	92.4	93.7	94.4	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
GE 500	79.5	92.4	92.4	93.7	94.4	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
GE 400	79.9	93.4	93.4	94.4	95.4	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 300	79.9	93.4	93.4	94.4	95.4	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 200	79.9	93.4	93.4	94.4	95.4	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 100	79.9	93.4	93.4	94.4	95.4	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE LI	79.9	93.4	93.4	94.4	95.4	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7

TOTAL NUMBER OF OBSERVATIONS: 353

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221120 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG HOURS(IST): 0300-0500

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 1	GE 2	GE 3	GE 4	GE 5	GE 6	GE 7	GE 8	GE 9	GE 10	GE 12	GE 14	GE 16	GE 18	GE 20	GE 25
NO CEIL	18.6	20.6	21.6	22.3	22.6	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3
GE 2100	18.9	21.6	22.0	23.3	23.6	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3
GE 1800	18.9	21.6	22.0	23.3	23.6	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3
GE 1600	18.9	21.6	22.6	23.3	23.6	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3
GE 1400	18.9	21.6	22.0	23.3	23.6	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3
GE 1200	18.9	21.6	22.0	23.3	23.6	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3
GE 1000	25.3	31.1	32.1	32.8	33.1	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
GE 900	25.3	31.1	32.1	32.8	33.1	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
GE 800	25.3	31.1	32.1	32.8	33.1	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
GE 700	25.3	31.1	32.1	32.8	33.1	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
GE 600	25.3	31.1	32.1	32.8	33.1	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
GE 500	26.7	32.8	33.6	34.5	34.8	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
GE 400	27.4	33.6	34.6	35.9	35.8	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2
GE 300	33.1	40.2	41.2	42.2	42.6	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
GE 200	34.8	42.2	42.2	44.3	44.6	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9
GE 100	36.1	44.3	45.3	46.3	46.6	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
GE 1500	54.4	53.2	64.5	65.9	66.2	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
GE 1400	54.4	67.6	68.9	70.3	70.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
GE 1300	61.5	67.6	70.9	72.3	72.6	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
GE 1200	61.5	72.9	72.3	73.6	74.0	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7
GE 1100	69.3	81.1	82.4	84.1	84.5	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1
GE 1000	71.6	84.8	86.1	87.8	88.2	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
GE 900	72.0	86.5	86.5	88.5	89.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
GE 800	72.6	86.6	87.5	90.5	91.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
GE 700	72.6	89.2	89.9	91.9	92.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
GE 600	74.0	89.2	90.9	92.9	93.9	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
GE 500	74.0	87.5	91.9	94.3	95.3	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
GE 400	74.3	90.9	93.2	95.9	96.6	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 300	74.3	91.2	93.6	95.9	97.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 200	74.3	91.2	93.6	95.9	97.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 100	74.3	91.2	93.6	95.9	97.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 100	74.3	91.2	93.6	95.9	97.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS: 296

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87

MONTH: AUG HOURS(IST): 0600-0800

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1 100	2 200	3 300	4 400	5 500	6 600	7 700	8 800	9 900	10 1000	11 1100	12 1200	13 1300	14 1400	15 1500	16 1600
NO CEIL	12.9	13.9	14.2	15.0	16.6	16.9	17.9	18.2	18.2	18.2	17.2	19.2	18.2	19.5	19.5	19.9
GE 20000	14.2	15.2	15.9	17.2	18.2	18.5	19.5	19.9	19.9	19.9	19.9	19.9	19.9	21.2	21.2	21.5
GE 18000	14.2	15.2	15.9	17.2	18.2	18.5	19.5	19.9	19.9	19.9	19.9	19.9	19.9	21.2	21.2	21.5
GE 16000	14.2	15.2	15.9	17.2	18.2	18.5	19.5	19.9	19.9	19.9	19.9	19.9	19.9	21.2	21.2	21.5
GE 14000	14.2	15.2	15.9	17.2	18.2	18.5	19.5	19.9	19.9	19.9	19.9	19.9	19.9	21.2	21.2	21.5
GE 12000	14.2	15.2	15.9	17.2	18.2	18.5	19.5	19.9	19.9	19.9	19.9	19.9	19.9	21.2	21.2	21.5
GE 10000	23.5	27.5	28.5	30.5	31.5	32.1	33.1	33.4	33.4	33.4	33.4	33.4	33.8	33.8	35.1	35.1
GE 9000	23.5	27.5	28.5	30.5	31.5	32.1	33.1	33.4	33.4	33.4	33.4	33.8	33.8	33.8	35.1	35.1
GE 8000	23.5	27.5	28.5	30.5	31.5	32.1	33.1	33.4	33.4	33.4	33.4	33.8	33.8	33.8	35.1	35.1
GE 7000	23.5	27.5	28.5	30.5	31.5	32.1	33.1	33.4	33.4	33.4	33.4	33.8	33.8	33.8	35.1	35.1
GE 6000	23.8	27.8	28.8	30.8	31.8	32.5	33.4	33.8	33.8	33.8	33.8	34.1	34.1	34.1	35.4	35.4
GE 5000	24.2	28.1	29.1	31.5	32.5	33.1	34.1	34.4	34.4	34.4	34.4	34.8	34.8	34.8	36.1	36.1
GE 4000	24.2	28.5	29.5	31.8	32.8	33.4	34.4	34.8	34.8	34.8	34.8	35.1	35.1	35.1	36.4	36.4
GE 3000	29.8	34.4	35.8	38.1	39.1	40.1	41.1	41.4	41.4	41.4	41.4	41.7	41.7	41.7	43.0	43.0
GE 2000	33.1	34.9	36.1	38.4	39.7	40.7	41.7	42.1	42.1	42.1	42.1	42.4	42.4	42.4	43.7	43.7
GE 1000	37.5	39.1	39.8	39.1	40.4	41.4	42.4	42.7	42.7	42.7	42.7	43.0	43.0	43.0	44.4	44.4
GE 25000	45.7	50.6	54.3	57.3	58.6	59.9	60.9	61.3	61.3	61.3	61.3	61.6	61.6	61.6	62.9	62.9
GE 20000	47.7	55.3	57.0	59.6	61.3	62.6	63.6	63.9	63.9	63.9	63.9	64.2	64.2	64.2	65.6	65.6
GE 18000	48.3	56.0	57.6	60.3	61.9	63.2	64.2	64.6	64.6	64.6	64.6	64.7	64.9	64.9	66.2	66.2
GE 16000	50.3	53.6	55.0	63.2	64.9	66.2	67.2	67.5	67.5	67.5	67.5	67.9	67.9	67.9	69.2	69.2
GE 14000	52.3	71.5	73.5	76.5	79.5	80.8	81.8	82.1	82.5	82.5	82.5	82.8	82.8	82.8	84.1	84.1
GE 12000	62.9	75.8	77.6	81.1	83.1	85.4	86.4	86.8	87.1	87.1	87.1	87.4	87.4	87.4	88.7	88.7
GE 10000	67.2	76.5	78.5	81.8	83.8	86.1	87.1	87.4	87.7	87.7	87.7	88.1	88.1	88.1	89.4	89.4
GE 9000	64.6	78.1	80.8	84.1	86.1	88.4	89.4	89.7	90.1	90.1	90.1	90.4	90.4	90.4	91.7	91.7
GE 8000	65.6	80.1	83.1	86.4	88.7	91.1	92.1	92.4	92.7	92.7	92.7	93.0	93.0	93.0	94.4	94.4
GE 7000	65.9	80.5	83.4	87.1	89.4	91.7	92.7	93.0	93.4	93.4	93.4	93.7	93.7	93.7	95.0	95.0
GE 6000	65.9	81.1	84.4	88.1	90.4	92.7	93.7	94.0	94.4	94.4	94.4	94.7	94.7	94.7	96.0	96.0
GE 5000	66.2	81.5	84.8	88.7	91.4	93.7	94.7	95.0	95.4	95.4	95.4	95.7	95.7	95.7	97.4	97.4
GE 4000	66.2	81.5	84.8	88.7	91.4	93.7	94.7	95.0	95.4	95.4	95.4	95.7	95.7	95.7	97.4	97.4
GE 3000	66.2	81.5	84.8	88.7	91.4	93.7	94.7	95.0	95.4	95.4	95.4	95.7	95.7	95.7	97.4	97.4
GE 2000	66.2	81.5	84.8	88.7	91.4	93.7	94.7	95.0	95.4	95.4	95.4	95.7	95.7	95.7	97.4	97.4
GE 1000	66.2	81.5	84.8	88.7	91.4	93.7	94.7	95.0	95.4	95.4	95.4	95.7	95.7	95.7	97.4	97.4
GE	66.2	81.5	84.8	88.7	91.4	93.7	94.7	95.0	95.4	95.4	95.4	95.7	95.7	95.7	97.4	97.4

TOTAL NUMBER OF OBSERVATIONS: 302

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG HOURS(IST): 0900-1100

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN	FEET	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
		160	90	40	60	48	40	32	24	20	16	12	10	8	5	4	0
NO CEIL		14.7	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	18.3	18.3	18.3	18.6
GE 00000	15.7	19.3	19.3	19.3	19.3	19.3	19.3	19.6	19.6	19.6	19.6	19.6	19.6	20.3	20.3	20.6	20.9
GE 18000	15.7	19.3	19.3	19.3	19.3	19.3	19.3	19.6	19.6	19.6	19.6	19.6	19.6	20.3	20.3	20.6	20.9
GE 16000	15.7	19.3	19.3	19.3	19.3	19.3	19.3	19.6	19.6	19.6	19.6	19.6	19.6	20.3	20.3	20.6	20.9
GE 14000	15.7	19.3	19.3	19.3	19.3	19.3	19.3	19.6	19.6	19.6	19.6	19.6	19.6	20.3	20.3	20.6	20.9
GE 12000	15.7	19.3	19.3	19.3	19.3	19.3	19.3	19.6	19.6	19.6	19.6	19.6	19.6	20.3	20.3	20.6	20.9
GE 10000	22.9	26.8	27.1	27.5	27.5	28.1	28.4	28.4	28.4	28.4	28.4	28.4	28.4	29.1	29.1	29.4	29.7
GE 9000	22.9	26.8	27.1	27.5	27.5	28.1	28.4	28.4	28.4	28.4	28.4	28.4	28.4	29.1	29.1	29.4	29.7
GE 8000	22.9	26.8	27.1	27.5	27.5	28.1	28.4	28.4	28.4	28.4	28.4	28.4	28.4	29.1	29.1	29.4	29.7
GE 7000	22.9	26.8	27.1	27.5	27.5	28.1	28.4	28.4	28.4	28.4	28.4	28.4	28.4	29.1	29.1	29.4	29.7
GE 6000	22.9	26.8	27.1	27.5	27.5	28.1	28.4	28.4	28.4	28.4	28.4	28.4	28.4	29.1	29.1	29.4	29.7
GE 5000	23.9	27.8	28.1	29.4	29.4	29.7	29.4	29.4	29.4	29.4	29.4	29.4	29.4	30.1	30.1	30.4	30.7
GE 4500	24.2	28.1	28.4	29.1	29.1	29.7	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.7	30.7	31.0	31.4
GE 4000	27.1	31.0	31.4	32.0	32.0	32.7	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.7	33.7	34.0	34.3
GE 3500	27.5	31.4	31.7	32.4	32.4	33.0	33.3	33.3	33.3	33.3	33.3	33.3	33.3	34.0	34.0	34.3	34.6
GE 3000	27.8	31.7	32.0	32.7	32.7	33.3	33.7	33.7	33.7	33.7	33.7	33.7	33.7	34.3	34.3	34.6	35.0
GE 2500	48.4	55.9	56.2	56.7	56.9	57.8	58.2	58.2	58.5	58.5	58.5	58.5	58.5	59.2	59.2	59.5	59.8
GE 2000	52.6	61.1	61.4	62.1	62.1	63.1	63.4	63.4	63.7	63.7	63.7	63.7	63.7	64.4	64.4	64.7	65.0
GE 1800	53.6	62.7	63.1	63.7	63.7	65.0	65.4	65.4	65.7	65.7	65.7	65.7	65.7	66.3	66.3	66.7	67.0
GE 1600	55.9	65.0	65.4	66.7	66.7	68.0	68.3	68.3	68.6	68.6	68.6	68.6	68.6	69.3	69.3	69.6	69.9
GE 1400	73.6	82.0	82.4	84.0	84.0	85.6	86.3	86.3	86.6	86.6	86.6	86.6	86.6	87.6	87.6	87.9	88.2
GE 1200	72.5	85.0	85.9	87.6	87.5	89.2	89.9	89.9	90.5	90.5	90.5	90.5	90.5	91.5	91.5	91.8	92.2
GE 1000	73.2	85.9	86.9	88.6	88.6	90.2	90.8	90.8	91.5	91.5	91.5	91.5	91.5	92.5	92.5	92.8	93.1
GE 900	73.5	86.6	87.6	89.5	89.5	91.2	91.8	91.8	92.5	92.5	92.5	92.5	92.5	93.5	93.5	93.8	94.1
GE 800	73.9	87.6	88.6	90.5	90.5	92.5	93.1	93.1	93.8	93.8	93.8	93.8	93.8	94.8	94.8	95.1	95.4
GE 700	74.5	88.9	89.9	91.8	91.8	93.8	94.4	94.4	95.1	95.1	95.1	95.1	95.1	96.1	96.1	96.4	96.7
GE 600	74.5	89.2	90.2	92.2	92.2	94.1	94.8	95.1	95.8	95.8	95.8	95.8	95.8	96.7	96.7	97.1	97.4
GE 500	74.5	89.2	90.2	92.2	92.2	94.1	94.8	95.1	95.8	95.8	95.8	95.8	95.8	96.7	96.7	97.1	97.4
GE 400	74.5	89.5	90.5	92.5	92.5	94.5	95.1	95.8	96.1	96.7	97.1	97.1	97.1	98.4	98.4	98.7	99.0
GE 300	74.5	89.5	90.5	92.5	92.5	94.5	95.1	95.8	96.1	96.7	97.1	97.1	97.1	98.4	98.4	98.7	99.0
GE 200	74.5	89.5	90.5	92.5	92.5	94.5	95.1	95.8	96.1	96.7	97.1	97.1	97.1	98.4	98.4	98.7	99.0
GE 100	74.5	89.5	90.5	92.5	92.5	94.5	95.1	95.8	96.1	96.7	97.1	97.1	97.1	98.4	98.4	98.7	99.0
GE 0	74.5	89.5	90.5	92.5	92.5	94.5	95.1	95.8	96.1	96.7	97.1	97.1	97.1	98.4	98.4	98.7	100.0

TOTAL NUMBER OF OBSERVATIONS: 336

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221150 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG HOURS (LST): 1200-1400

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 200	GE 400	GE 600	GE 800	GE 1000	GE 1200	GE 1400	GE 1600	GE 1800	GE 2000	GE 2200	GE 2400	GE 2600	GE 2800	GE 3000
NO CLIL	15.7	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1
GE 20000	18.7	20.4	20.4	20.4	20.4	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
GE 18000	18.7	20.4	20.4	20.4	20.4	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
GE 16000	18.7	20.4	20.4	20.4	20.4	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
GE 14000	18.7	20.4	20.4	20.4	20.4	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
GE 12000	18.7	20.4	20.4	20.4	20.4	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
GE 10000	25.1	27.4	27.4	27.4	27.4	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1
GE 9000	25.1	27.4	27.4	27.4	27.4	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1
GE 8000	25.1	27.4	27.4	27.4	27.4	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1
GE 7000	25.1	27.4	27.4	27.4	27.4	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1
GE 6000	25.1	27.4	27.4	27.4	27.4	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1
GE 5000	25.8	28.1	28.1	28.1	28.1	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
GE 4000	26.8	29.1	29.1	29.1	29.1	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
GE 3000	32.8	35.5	35.5	35.5	35.5	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
GE 2000	34.1	37.1	37.1	37.1	37.1	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
GE 1000	36.1	39.1	39.1	39.1	39.1	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8
GE 800	64.2	68.2	68.2	68.2	68.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2
GE 600	67.6	71.6	71.6	71.6	71.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
GE 400	69.6	73.6	73.6	73.6	73.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6
GE 200	71.6	75.9	75.9	75.9	75.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
GE 100	84.6	91.0	91.0	91.0	91.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
GE 50	95.3	93.0	93.3	93.3	93.3	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
GE 20	86.3	94.0	94.6	94.6	94.6	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
GE 10	86.6	94.3	95.0	95.0	95.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 5	87.0	95.3	96.0	96.7	97.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
GE 0	87.0	95.7	96.3	97.0	97.3	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 500	87.0	95.7	96.3	97.0	97.3	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 400	87.0	95.7	96.7	97.3	97.7	99.3	99.3	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 300	87.0	95.7	96.7	97.3	97.7	99.3	99.3	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 200	87.0	95.7	96.7	97.3	98.0	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	87.0	95.7	96.7	97.3	98.0	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	87.0	95.7	96.7	97.3	98.0	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 299

GLOBAL CLIMATOLOGY BRANCH
USAF/CLAC
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG HOURS(LST): 1500-1700

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	6	7	8	9	4	5	6	7	8	9	1	2	3	4	5
14	1	6	7	8	9	4	5	6	7	8	9	1	2	3	4	5
160	1	6	7	8	9	4	5	6	7	8	9	1	2	3	4	5
NO CEIL	16.2	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
GE 2000	18.9	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
GE 1800	18.9	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
GE 1600	18.9	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
GE 1400	18.9	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
GE 1200	18.9	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
GE 1000	26.2	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
GE 900	26.2	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
GE 800	26.2	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
GE 700	26.5	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1
GE 600	26.5	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1
GE 500	27.7	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
GE 400	27.8	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
GE 300	32.8	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4
GE 200	34.1	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8
GE 100	35.8	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
GE 2000	72.2	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
GE 1800	72.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
GE 1600	75.2	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
GE 1400	75.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5
GE 1200	78.4	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
GE 1000	89.7	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
GE 900	89.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
GE 800	89.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 700	89.7	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
GE 600	89.7	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
GE 500	89.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
GE 400	89.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
GE 300	89.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
GE 200	89.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
GE 100	89.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
GE 0	89.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7

TOTAL NUMBER OF OBSERVATIONS: 302

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221132 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG HOURS(LST): 1800-2000

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN FEET	BT 100	GE 20	GE 30	GE 40	GE 50	GE 60	GE 70	GE 80	GE 90	GE 100	GE 120	GE 140	GE 160	GE 180	GE 200	GE 250	GE 300
NO CEIL	17.7	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
GE 20000	20.7	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4
GE 18000	20.7	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4
GE 16000	20.7	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4
GE 14000	20.7	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4
GE 12000	20.7	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4
GE 10000	30.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
GE 9000	30.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
GE 8000	30.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
GE 7000	30.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
GE 6000	31.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1
GE 5000	31.4	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1
GE 4500	32.1	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4
GE 4000	40.5	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1
GE 3500	42.5	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
GE 3000	44.5	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2
GE 2500	73.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
GE 2000	76.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9
GE 1800	79.2	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9
GE 1600	78.6	80.6	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
GE 1200	83.0	91.0	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
GE 1000	89.6	92.3	93.6	93.6	93.6	93.6	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
GE 900	89.0	93.0	95.3	95.3	95.3	95.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
GE 800	89.3	93.3	95.7	95.7	95.7	95.7	96.0	96.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 700	90.0	95.0	97.3	97.3	97.3	97.3	98.0	98.7	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 600	90.0	95.0	97.3	97.3	97.3	97.3	98.0	98.7	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 500	90.0	95.0	97.3	97.3	97.3	97.3	98.0	98.7	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 400	90.0	95.0	97.3	97.3	97.3	97.3	98.0	98.7	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 300	90.0	95.0	97.3	97.3	97.3	97.3	98.0	98.7	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 200	90.0	95.0	97.3	97.3	97.3	97.3	98.0	98.7	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 100	90.0	95.0	97.3	97.3	97.3	97.3	98.0	98.7	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0

TOTAL NUMBER OF OBSERVATIONS: 249

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 22130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTHS: ALL HOURS(IST): 2100-2300

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 100	GE 90	GE 80	GE 70	GE 60	GE 40	GE 30	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	27.6	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9
GE 20000	26.9	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2
GE 16000	26.9	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2
GE 16000	26.9	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2
GE 14000	26.9	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2
GE 12000	26.9	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
GE 10000	39.5	41.5	41.5	41.5	41.5	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
GE 9000	39.5	41.5	41.5	41.5	41.5	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
GE 8000	39.5	41.5	41.5	41.5	41.5	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
GE 7000	39.5	41.5	41.5	41.5	41.5	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
GE 6000	39.5	41.9	41.9	41.9	41.9	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2
GE 5000	41.2	43.2	43.2	43.2	43.2	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5
GE 4500	41.9	43.9	43.9	43.9	43.9	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2
GE 4000	47.5	49.5	49.5	49.5	49.5	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
GE 3500	49.5	50.8	50.8	50.8	50.8	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2
GE 3000	50.8	52.8	52.8	52.8	52.8	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2
GE 2500	71.4	74.8	74.8	74.8	74.8	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
GE 2000	74.4	77.7	77.7	77.7	77.7	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
GE 1800	75.1	78.4	78.4	78.4	78.4	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
GE 1600	76.1	79.4	79.4	79.4	79.4	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7
GE 1400	85.7	90.0	90.0	90.0	90.0	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
GE 1000	86.0	91.4	92.0	92.0	92.7	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
GE 900	87.4	92.7	93.4	94.0	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
GE 800	87.7	93.4	94.4	95.3	95.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
GE 700	89.0	95.3	96.3	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
GE 600	89.0	95.7	96.7	98.3	98.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 500	89.0	96.0	97.0	98.7	99.0	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 400	89.0	96.0	97.0	98.7	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 300	89.0	96.0	97.0	98.7	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	89.0	96.0	97.0	98.7	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	89.0	96.0	97.0	98.7	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	89.0	96.0	97.0	98.7	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 341

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271133 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: ALL HOURS(UT): ALL

CEILING		VISIBILITY IN HUNDREDS OF METERS															
FEET	160	GE 90	GE 100	GE 60	GE 45	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0	
NO CEIL	17.3	19.9	19.1	19.4	19.6	19.7	19.9	19.9	19.9	19.9	19.9	19.9	20.1	20.2	20.2	20.3	
GE 2000	19.3	21.0	21.4	21.7	21.9	22.1	22.3	22.3	22.3	22.3	22.4	22.4	22.5	22.7	22.7	22.8	
GE 1800	19.3	21.2	21.4	21.7	21.9	22.1	22.3	22.3	22.3	22.3	22.4	22.4	22.5	22.7	22.7	22.8	
GE 1600	19.3	21.2	21.4	21.7	21.9	22.1	22.3	22.3	22.3	22.3	22.4	22.4	22.5	22.7	22.7	22.8	
GE 1400	19.3	21.2	21.4	21.7	21.9	22.1	22.3	22.3	22.3	22.3	22.4	22.4	22.5	22.7	22.7	22.8	
GE 1200	19.3	21.3	21.5	21.6	21.9	22.2	22.3	22.4	22.4	22.4	22.4	22.4	22.5	22.7	22.9	22.8	
GE 1000	27.9	31.3	31.6	32.0	32.2	32.7	32.9	32.9	32.9	32.9	33.0	33.1	33.2	33.3	33.4	33.5	
GE 900	27.9	31.7	31.6	32.0	32.2	32.7	32.9	32.9	32.9	32.9	33.0	33.1	33.2	33.3	33.4	33.5	
GE 800	27.9	31.3	31.6	32.0	32.2	32.7	32.9	32.9	32.9	32.9	33.0	33.1	33.2	33.3	33.4	33.5	
GE 700	27.9	31.3	31.6	32.0	32.2	32.6	32.9	33.0	33.0	33.0	33.1	33.1	33.2	33.4	33.4	33.5	
GE 600	28.1	31.4	31.7	32.1	32.4	32.9	33.1	33.1	33.1	33.1	33.2	33.2	33.3	33.5	33.6	33.6	
GE 500	29.9	32.4	32.6	33.1	33.3	33.9	34.1	34.1	34.1	34.1	34.2	34.2	34.3	34.5	34.6	34.6	
GE 450	29.9	33.1	33.3	33.9	34.1	34.7	34.8	34.9	34.9	34.9	35.0	35.0	35.1	35.3	35.3	35.4	
GE 400	35.2	39.0	39.4	40.0	40.2	40.6	41.0	41.0	41.0	41.0	41.1	41.2	41.3	41.4	41.5	41.6	
GE 350	36.3	40.3	40.7	41.2	41.5	42.2	42.3	42.4	42.4	42.4	42.4	42.5	42.6	42.8	42.8	42.9	
GE 300	37.7	41.6	42.2	42.7	43.3	43.6	43.8	43.9	43.9	43.9	44.0	44.0	44.1	44.3	44.3	44.4	
GE 250	61.1	66.5	67.1	67.6	68.2	69.0	69.1	69.2	69.2	69.2	69.3	69.4	69.5	69.6	69.7	69.8	
GE 200	64.4	70.0	70.6	71.3	71.7	72.5	72.6	72.7	72.7	72.7	72.7	72.8	73.0	73.1	73.2	73.3	
GE 180	65.7	71.6	72.1	72.8	73.2	74.0	74.2	74.3	74.3	74.3	74.4	74.4	74.4	74.7	74.8	74.8	
GE 160	67.0	73.0	73.5	74.4	74.8	75.6	75.8	75.8	75.9	75.9	76.0	76.0	76.1	76.3	76.3	76.4	
GE 140	77.7	85.8	86.6	87.7	88.4	89.2	89.5	89.5	89.5	89.7	89.7	89.8	90.0	90.1	90.2	90.2	
GE 120	79.2	88.3	89.2	90.4	90.9	92.1	92.3	92.3	92.5	92.5	92.6	92.7	92.8	93.0	93.0	93.1	
GE 100	79.8	89.1	90.1	91.4	91.7	93.2	93.4	93.4	93.6	93.6	93.7	93.8	93.9	94.1	94.1	94.2	
GE 90	80.7	90.0	91.0	92.5	93.1	94.5	94.7	94.8	94.9	95.0	95.1	95.1	95.3	95.5	95.5	95.6	
GE 80	80.9	91.3	92.5	94.1	94.8	96.2	96.4	96.5	96.6	96.7	96.8	96.8	97.0	97.2	97.2	97.3	
GE 70	81.1	91.6	93.1	94.7	95.4	96.9	97.2	97.2	97.4	97.4	97.5	97.6	97.7	97.9	98.0	98.0	
GE 60	81.1	92.2	93.6	95.2	95.9	97.4	97.7	97.8	97.8	98.0	98.0	98.1	98.3	98.5	98.5	98.6	
GE 50	81.2	92.5	94.1	95.7	96.5	98.1	98.3	98.5	98.5	98.7	98.8	98.9	99.0	99.2	99.3	99.3	
GE 40	81.2	92.6	94.1	95.8	96.6	98.3	98.5	98.6	98.6	98.9	99.0	99.1	99.3	99.5	99.5	99.6	
GE 30	81.2	92.6	94.1	95.8	96.6	98.3	98.5	98.7	98.9	99.0	99.1	99.2	99.3	99.5	99.6	99.7	
GE 20	81.2	92.6	94.1	95.8	96.6	98.3	98.5	98.7	98.9	99.0	99.1	99.2	99.3	99.5	99.6	100.0	
GE 10	81.2	92.6	94.1	95.8	96.6	98.3	98.5	98.7	98.9	99.0	99.1	99.2	99.3	99.5	99.6	100.0	

TOTAL NUMBER OF OBSERVATIONS: 2409

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86

MONTH: SEP

HOURS(IST): 0000-0200

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN	FEET	GE 160	GE 200	GE 240	GE 280	GE 320	GE 360	GE 400	GE 440	GE 480	GE 520	GE 560	GE 600	GE 640	GE 680	GE 720	GE 760
NO CEIL	1	19.2	22.4	22.4	23.1	23.4	23.6	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
GE 1000	20.3	23.4	23.4	24.1	24.5	24.6	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
GE 1200	20.3	23.4	23.4	24.1	24.5	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
GE 1400	20.3	23.4	23.4	24.1	24.5	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
GE 1600	20.3	23.4	23.4	24.1	24.5	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
GE 1800	29.4	35.3	35.7	36.4	36.7	37.1	37.1	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
GE 2000	29.4	35.3	35.7	36.4	36.7	37.1	37.1	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
GE 2200	29.4	35.3	35.7	36.4	36.7	37.1	37.1	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
GE 2400	29.4	36.4	36.7	37.4	37.8	38.1	38.1	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
GE 2600	30.8	36.7	37.1	37.8	38.1	38.5	38.5	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8
GE 2800	31.8	37.8	38.1	38.8	39.2	39.5	39.5	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9
GE 3000	38.1	44.4	44.8	45.5	45.8	46.2	46.2	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
GE 3200	41.3	47.6	47.9	48.6	49.0	49.3	49.3	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
GE 3400	44.8	51.0	51.4	52.1	52.4	52.8	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1
GE 3600	61.3	72.7	73.1	73.8	74.1	74.5	74.8	75.2	75.2	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
GE 3800	66.4	76.2	76.6	77.3	77.6	78.0	78.3	78.7	78.7	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0
GE 4000	67.1	77.3	77.6	78.3	78.7	79.0	79.4	79.7	79.7	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1
GE 4200	69.0	79.4	79.7	80.4	80.8	81.1	81.5	81.8	81.8	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
GE 4400	75.5	83.1	83.5	84.2	84.5	84.9	85.3	85.6	85.6	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
GE 4600	76.6	84.5	84.9	85.6	85.9	86.3	86.7	87.0	87.0	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4
GE 4800	77.3	85.9	86.3	87.0	87.3	87.7	88.1	88.4	88.4	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8
GE 5000	78.3	86.9	87.3	88.0	88.3	88.7	89.1	89.4	89.4	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8
GE 5200	79.7	88.3	88.7	89.4	89.7	90.1	90.5	90.8	90.8	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
GE 5400	79.7	89.4	89.8	90.1	90.5	90.9	91.3	91.6	91.6	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
GE 5600	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 5800	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 6000	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 6200	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 6400	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 6600	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 6800	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 7000	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 7200	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 7400	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 7600	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 7800	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 8000	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 8200	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 8400	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 8600	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 8800	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 9000	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 9200	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 9400	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 9600	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 9800	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 10000	79.0	94.4	94.8	95.5	95.8	96.2	96.5	96.9	96.9	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3

TOTAL NUMBER OF OBSERVATIONS: 256

GLOBAL CLIMATOLOGY BRANCH
USAF/CIAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS(IST): 0300-0500

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO CEIL	19.8	21.2	21.3	22.5	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
GE 20000	18.8	21.2	21.4	22.5	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
GE 18000	18.8	21.2	21.4	22.5	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
GE 16000	18.8	21.2	21.4	22.5	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
GE 14000	18.8	21.2	21.4	22.5	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
GE 12000	18.8	21.2	21.4	22.5	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
GE 10000	28.0	32.4	33.1	34.1	34.5	35.2	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
GE 9000	28.0	32.4	33.1	34.1	34.5	35.2	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
GE 8000	28.0	32.4	33.1	34.1	34.5	35.2	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
GE 7000	28.0	32.4	33.1	34.1	34.5	35.2	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
GE 6000	28.0	32.4	33.1	34.1	34.5	35.2	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
GE 5000	29.4	33.8	34.5	35.5	35.8	36.5	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9
GE 4500	30.4	34.8	35.5	36.5	36.9	37.5	37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9
GE 4000	33.5	42.7	43.3	44.4	45.1	45.7	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
GE 3500	39.6	44.7	45.4	46.4	47.1	47.8	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1
GE 3000	41.3	46.6	47.4	48.5	49.1	49.8	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2
GE 2500	58.4	66.6	67.2	68.9	69.6	70.3	70.6	70.6	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
GE 2000	60.1	68.6	69.6	71.3	72.0	72.7	73.0	73.0	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4
GE 1800	61.1	69.6	70.6	72.4	73.1	73.7	74.1	74.1	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
GE 1500	61.8	70.6	71.7	73.4	74.1	74.7	75.1	75.1	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4
GE 1200	72.4	83.6	85.1	87.4	88.4	89.4	89.8	89.8	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
GE 1000	74.1	85.7	87.4	89.4	90.4	91.5	91.8	91.8	92.2	92.2	92.5	92.5	92.5	92.5	92.5	92.5
GE 900	75.4	87.4	89.1	91.4	92.2	93.2	93.5	93.5	93.7	93.9	94.2	94.2	94.2	94.2	94.2	94.2
GE 800	76.1	88.4	90.1	92.5	93.5	94.5	94.9	94.9	95.2	95.2	95.6	95.6	95.6	95.6	95.6	95.6
GE 700	76.8	89.4	91.1	93.9	94.9	95.9	96.2	96.2	96.6	96.9	97.3	97.3	97.3	97.3	97.3	97.3
GE 600	76.8	89.4	91.1	93.9	94.9	95.9	96.6	96.6	96.9	97.3	97.6	97.6	97.6	97.6	97.6	97.6
GE 500	76.8	89.8	91.5	94.5	95.6	96.6	97.3	97.3	97.6	98.0	98.3	98.3	98.3	98.3	98.3	98.3
GE 400	76.8	89.8	91.5	94.5	95.6	96.6	97.3	97.3	97.6	98.0	98.3	98.3	98.3	98.3	98.3	98.3
GE 300	76.8	89.8	91.5	94.5	95.6	96.9	97.6	97.6	98.0	98.3	98.6	98.6	98.6	98.6	98.6	98.6
GE 200	76.8	89.8	91.5	94.5	95.6	96.9	97.6	97.6	98.0	98.3	98.6	98.6	98.6	98.6	98.6	98.6
GE 100	76.8	89.8	91.5	94.5	95.6	96.9	97.6	97.6	98.0	98.3	98.6	98.6	98.6	98.6	98.6	98.6
GE 0	76.8	89.8	91.5	94.5	95.6	96.9	97.6	97.6	98.0	98.3	98.6	98.6	98.6	98.6	98.6	100.0

TOTAL NUMBER OF OBSERVATIONS: 293

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MUKHANSK USSR

PERIOD OF RECORD: 77-84
MONTH: SEP HOURS (LST): 0600-0800

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 100	GE 40	GE 40	GE 60	GE 48	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	9.3	11.0	11.4	12.1	12.1	12.1	12.1	12.1	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
GE 20000	10.3	12.1	12.5	13.2	13.2	13.2	13.2	13.2	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
GE 18000	10.3	12.1	12.5	13.2	13.2	13.2	13.2	13.2	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
GE 16000	10.3	12.1	12.5	13.2	13.2	13.2	13.2	13.2	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
GE 14000	10.3	12.1	12.5	13.2	13.2	13.2	13.2	13.2	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
GE 12000	10.3	12.1	12.5	13.2	13.2	13.2	13.2	13.2	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
GE 10000	21.0	25.6	26.1	26.7	26.7	27.0	27.4	28.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
GE 9000	21.0	25.6	26.1	26.7	26.7	27.0	27.4	28.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
GE 8000	21.0	25.6	26.1	26.7	26.7	27.0	27.4	28.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
GE 7000	21.0	25.6	26.1	26.7	26.7	27.0	27.4	28.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
GE 6000	21.0	25.6	26.1	26.7	26.7	27.0	27.4	28.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
GE 5000	21.7	26.3	26.7	27.8	27.8	28.1	28.5	29.5	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
GE 4500	22.8	27.4	27.4	28.8	28.8	29.2	29.5	30.6	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7
GE 4000	24.5	33.8	34.2	35.2	35.2	35.6	35.9	37.0	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
GE 3500	30.6	35.9	36.3	37.4	37.4	37.7	38.1	39.1	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2
GE 3000	32.0	37.7	38.1	39.1	39.1	39.5	39.9	40.9	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
GE 2500	48.8	54.4	54.7	60.1	60.1	60.9	61.2	62.3	63.7	63.3	63.7	63.3	63.3	63.3	63.3	63.3
GE 2000	50.9	51.2	51.6	63.0	63.0	63.7	64.1	65.1	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2
GE 1800	52.3	52.6	53.0	64.4	64.4	65.1	65.5	66.5	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
GE 1600	54.4	54.8	55.1	66.5	66.5	67.3	67.6	68.7	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8
GE 1400	65.8	72.4	72.4	82.9	83.3	85.1	85.4	86.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
GE 1200	67.3	81.9	82.9	85.4	85.8	87.5	87.9	89.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 1000	68.7	83.3	84.3	86.8	87.2	89.0	89.3	90.4	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
GE 900	68.7	83.3	84.3	86.8	87.2	89.0	89.3	90.4	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
GE 800	69.4	85.4	85.5	89.3	89.3	90.4	90.4	91.8	92.5	93.6	94.7	94.7	94.7	94.7	94.7	94.7
GE 700	69.4	85.4	85.5	89.3	89.3	90.4	90.4	91.8	92.5	93.6	94.7	94.7	94.7	94.7	94.7	94.7
GE 600	69.4	85.4	85.5	89.3	89.3	90.4	90.4	91.8	92.5	93.6	94.7	94.7	94.7	94.7	94.7	94.7
GE 500	69.4	85.4	85.5	89.3	89.3	90.4	90.4	91.8	92.5	93.6	94.7	94.7	94.7	94.7	94.7	94.7
GE 400	69.4	85.4	85.5	89.3	89.3	90.4	90.4	91.8	92.5	93.6	94.7	94.7	94.7	94.7	94.7	94.7
GE 300	69.4	85.4	85.5	89.3	89.3	90.4	90.4	91.8	92.5	93.6	94.7	94.7	94.7	94.7	94.7	94.7
GE 200	69.4	85.4	85.5	89.3	89.3	90.4	90.4	91.8	92.5	93.6	94.7	94.7	94.7	94.7	94.7	94.7
GE 100	69.4	85.4	85.5	89.3	89.3	90.4	90.4	91.8	92.5	93.6	94.7	94.7	94.7	94.7	94.7	94.7
GE 0	69.4	85.4	85.5	89.3	89.3	90.4	90.4	91.8	92.5	93.6	94.7	94.7	94.7	94.7	94.7	94.7

TOTAL NUMBER OF OBSERVATIONS: 261

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-85

MONTH: SEP HOURS(IST): 0900-1100

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 90	GE 40	GE 60	GE 48	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	17.4	11.5	12.2	12.2	12.8	13.2	13.2	13.2	13.2	13.5	17.9	13.9	13.9	14.2	14.2	14.2
GE 20000	11.8	13.2	13.9	13.9	14.9	15.3	15.3	15.3	15.3	15.6	16.0	16.0	16.0	16.3	16.3	16.3
GE 18000	11.8	13.2	13.9	13.9	14.9	15.3	15.3	15.3	15.3	15.6	16.0	16.0	16.0	16.3	16.3	16.3
GE 16000	11.8	13.2	13.9	13.9	14.9	15.3	15.3	15.3	15.3	15.6	16.0	16.0	16.0	16.3	16.3	16.3
GE 14000	11.8	13.2	13.9	13.9	14.9	15.3	15.3	15.3	15.3	15.6	16.0	16.0	16.0	16.3	16.3	16.3
GE 12000	11.8	13.2	13.9	13.9	14.9	15.3	15.3	15.3	15.3	15.6	16.0	16.0	16.0	16.3	16.3	16.3
GE 10000	21.2	23.6	24.3	24.3	25.7	27.4	27.4	27.6	28.5	28.8	29.2	29.2	29.5	29.9	29.9	29.9
GE 9000	21.2	23.6	24.3	24.3	25.7	27.4	27.4	27.6	28.5	28.8	29.2	29.2	29.5	29.9	29.9	29.9
GE 8000	21.2	23.6	24.3	24.3	25.7	27.4	27.4	27.6	28.5	28.8	29.2	29.2	29.5	29.9	29.9	29.9
GE 7000	21.2	23.6	24.3	24.3	25.7	27.4	27.4	27.6	28.5	28.8	29.2	29.2	29.5	29.9	29.9	29.9
GE 6000	21.2	23.6	24.3	24.3	25.7	27.4	27.4	27.6	28.5	28.8	29.2	29.2	29.5	29.9	29.9	29.9
GE 5000	21.9	24.0	24.7	24.7	26.4	28.1	28.1	28.5	29.2	29.5	29.9	29.9	30.2	30.6	30.6	30.6
GE 4000	27.6	29.0	29.7	29.7	27.4	29.2	29.2	29.5	30.2	30.6	30.9	30.9	31.3	31.6	31.6	31.6
GE 3000	28.9	31.0	32.6	32.6	35.1	36.8	36.8	37.2	37.8	38.2	38.5	38.5	38.9	39.2	39.2	39.2
GE 2500	33.2	34.0	35.1	35.4	37.8	39.6	39.6	39.9	40.6	41.0	41.3	41.3	41.7	42.0	42.0	42.0
GE 2000	31.6	35.8	36.8	37.2	39.5	41.3	41.3	41.7	42.4	42.7	43.1	43.1	43.4	43.8	43.8	43.8
GE 1800	44.4	50.7	52.4	53.8	56.6	58.3	58.3	58.7	59.4	60.1	60.4	60.4	60.8	61.1	61.1	61.1
GE 1600	47.2	53.8	55.6	56.9	59.7	61.5	61.5	61.8	62.5	63.2	63.5	63.5	63.9	64.2	64.2	64.2
GE 1400	48.0	54.9	56.9	58.3	61.1	62.8	62.8	63.5	64.2	64.9	65.3	65.3	65.6	66.0	66.0	66.0
GE 1200	51.4	58.3	60.4	61.8	64.6	66.7	66.7	67.4	68.1	68.8	69.1	69.1	69.4	69.8	69.8	69.8
GE 1000	63.5	72.9	75.0	76.7	79.5	82.6	82.6	83.3	84.4	85.1	85.4	85.4	85.8	86.1	86.1	86.1
GE 900	64.6	74.7	77.1	78.5	81.3	84.4	84.4	85.4	86.5	87.2	87.5	87.5	87.8	88.2	88.2	88.2
GE 800	65.3	75.3	78.5	79.7	82.6	85.8	85.8	86.8	87.8	88.5	88.9	88.9	89.2	89.6	89.6	89.6
GE 700	66.7	77.1	80.6	81.9	84.7	87.8	87.8	88.9	89.9	90.6	91.0	91.0	91.3	91.7	91.7	91.7
GE 600	67.7	78.8	82.3	83.7	87.2	90.6	90.6	92.0	93.1	93.8	94.1	94.1	94.4	94.8	94.8	94.8
GE 500	67.7	78.2	82.6	84.0	87.5	91.0	91.0	92.4	93.4	94.4	94.8	94.8	95.1	95.5	95.5	95.5
GE 400	67.7	79.2	82.6	84.0	87.5	91.3	91.3	92.7	93.8	95.5	96.8	96.8	96.2	96.5	96.5	96.5
GE 300	67.7	79.5	83.3	84.7	88.2	92.0	92.0	93.4	94.4	96.2	96.5	96.5	96.9	97.2	97.2	97.2
GE 200	67.7	79.9	83.7	85.1	88.5	92.4	92.4	93.8	95.1	96.9	97.2	97.2	97.6	97.9	97.9	97.9
GE 100	67.7	79.9	83.7	85.1	88.5	92.4	92.4	93.8	95.1	96.9	97.2	97.2	98.3	99.0	99.0	99.0
GE 0	67.7	79.9	83.7	85.1	88.5	92.4	92.4	93.8	95.1	96.9	97.2	97.2	98.3	99.3	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS: 268

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS(LOCAL): 1200-1400

CEILING IN FEET	1	GT 100	GE 90	GE 80	GE 70	GE 60	GE 50	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 3
NO CEIL	14.0		14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
GE 20000	14.8	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
GE 18000	14.8	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
GE 16000	14.8	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
GE 14000	14.8	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
GE 12000	14.8	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
GE 10000	26.6	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
GE 9000	26.6	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
GE 8000	26.6	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
GE 7000	26.6	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
GE 6000	26.6	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
GE 5000	27.7	29.9	30.6	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
GE 4000	29.4	30.6	31.4	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7
GE 3000	31.7	33.9	35.4	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8
GE 2000	33.6	35.8	37.3	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
GE 1000	34.7	37.4	39.1	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5
GE 2000	54.6	59.8	62.0	62.7	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1
GE 2000	57.9	63.0	66.1	66.8	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2
GE 1800	59.0	65.7	67.9	68.6	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
GE 1600	64.2	71.6	73.8	74.5	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
GE 1400	75.6	86.0	88.0	89.7	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 1200	75.6	86.3	89.3	90.4	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
GE 1000	76.4	87.5	91.4	91.6	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
GE 900	76.4	88.0	91.5	92.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
GE 800	76.4	89.3	92.3	93.7	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5
GE 700	76.8	89.3	92.6	94.5	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
GE 600	76.8	89.3	92.6	94.5	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
GE 500	76.8	89.3	92.6	94.5	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
GE 400	76.8	89.7	93.0	94.8	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
GE 300	76.8	89.7	93.0	94.8	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
GE 200	76.8	89.7	93.0	94.8	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
GE 100	76.8	89.7	93.0	94.8	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
GE 0	76.8	89.7	93.0	94.8	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6

TOTAL NUMBER OF OBSERVATIONS: 271

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS(IST): 1500-1700

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 16"	GE 90	GE 40	GE 60	GE 49	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	11.7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.4	12.4	12.4	12.4	12.4	12.4
GE 20000	14.1	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
GE 18000	14.1	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
GE 16000	14.1	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
GE 14000	14.1	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
GE 12000	14.1	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
GE 10000	25.8	26.1	26.8	26.8	26.8	26.8	26.8	26.8	27.1	27.1	27.5	27.5	27.5	27.5	27.5	27.5
GE 9000	25.8	26.1	26.8	26.8	26.8	26.8	26.8	26.8	27.1	27.1	27.5	27.5	27.5	27.5	27.5	27.5
GE 8000	25.8	26.1	26.8	26.8	26.8	26.8	26.8	26.8	27.1	27.1	27.5	27.5	27.5	27.5	27.5	27.5
GE 7000	25.8	26.1	26.8	26.8	26.8	26.8	26.8	26.8	27.1	27.1	27.5	27.5	27.5	27.5	27.5	27.5
GE 6000	25.8	26.1	26.8	26.8	26.8	26.8	26.8	26.8	27.1	27.1	27.5	27.5	27.5	27.5	27.5	27.5
GE 5000	26.8	27.1	27.8	27.8	27.8	27.8	27.8	27.8	28.2	28.2	28.5	28.5	28.5	28.5	28.5	28.5
GE 4500	28.9	29.2	29.9	29.9	29.9	29.9	29.9	29.9	30.2	30.2	30.6	30.6	30.6	30.6	30.6	30.6
GE 4000	36.9	37.6	38.6	39.2	39.2	39.2	39.2	39.2	39.5	39.5	39.9	39.9	39.9	39.9	39.9	39.9
GE 3500	38.5	39.5	40.5	40.9	40.9	40.9	40.9	40.9	41.2	41.2	41.6	41.6	41.6	41.6	41.6	41.6
GE 3000	40.5	41.6	42.6	43.0	43.0	43.0	43.0	43.0	43.3	43.3	43.6	43.6	43.6	43.6	43.6	43.6
GE 2500	62.2	65.6	67.0	67.4	67.4	67.7	67.7	68.0	68.4	68.4	68.7	69.1	69.1	69.1	69.1	69.1
GE 2000	67.0	70.4	71.8	72.2	72.2	72.5	72.5	72.9	73.2	73.2	73.5	73.9	73.9	73.9	73.9	73.9
GE 1800	69.4	72.9	74.2	74.6	74.6	74.9	74.9	75.3	75.6	75.6	75.9	76.3	76.3	76.3	76.3	76.3
GE 1600	72.9	76.6	78.0	78.4	78.4	78.7	78.7	79.0	79.4	79.4	79.7	80.1	80.1	80.1	80.1	80.1
GE 1400	82.5	80.0	81.4	82.1	82.1	82.6	82.6	83.5	83.8	83.8	84.2	84.6	84.6	85.2	85.2	85.2
GE 1200	83.9	81.4	82.8	83.8	83.8	84.5	84.5	85.2	85.5	85.5	85.9	86.6	86.6	86.9	86.9	86.9
GE 1000	81.8	81.8	82.4	83.5	83.5	84.5	84.5	85.2	85.2	85.9	86.2	86.2	86.2	86.6	86.6	86.6
GE 900	83.8	81.8	82.4	83.5	83.5	84.5	84.5	85.2	85.2	85.9	86.2	86.2	86.2	86.6	86.6	86.6
GE 800	83.8	82.1	83.8	84.8	84.8	85.5	85.5	86.2	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 700	83.8	82.1	83.8	84.8	84.8	85.5	85.5	86.2	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 600	83.8	82.1	83.8	84.8	84.8	85.5	85.5	86.2	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 500	83.8	82.4	84.2	85.2	85.2	85.9	85.9	86.6	87.3	87.3	87.6	88.3	88.3	88.6	88.6	88.6
GE 400	83.8	82.4	84.2	85.2	85.2	85.9	85.9	86.6	87.3	87.3	87.6	88.3	88.3	88.6	88.6	88.6
GE 300	83.8	82.4	84.2	85.2	85.2	85.9	85.9	86.6	87.3	87.3	87.6	88.3	88.3	88.6	88.6	88.6
GE 200	84.2	82.8	84.5	85.9	85.9	86.6	86.6	87.3	87.9	87.9	88.3	89.0	89.0	89.3	89.3	89.3
GE 100	84.2	83.1	85.2	86.2	86.2	86.9	86.9	87.6	88.3	88.6	89.0	89.7	89.7	100.0	100.0	100.0
GE 0	84.2	83.1	85.2	86.2	86.2	86.9	86.9	87.6	88.3	88.6	89.0	89.7	89.7	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 291

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS(IST): 1800-2000

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 90	GE 40	GE 60	GE 48	GE 30	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	17.0	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
GE 20000	19.5	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
GE 18000	19.5	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
GE 16000	19.5	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
GE 14000	19.5	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
GE 12000	19.5	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
GE 10000	32.1	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
GE 9000	32.1	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
GE 8000	32.1	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
GE 7000	32.1	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
GE 6000	32.5	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2
GE 5000	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3
GE 4500	34.3	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
GE 4000	39.7	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5
GE 3500	41.2	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
GE 3000	42.6	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1
GE 2500	66.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1
GE 2000	69.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
GE 1800	71.8	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
GE 1600	72.2	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3
GE 1400	66.3	93.1	93.5	93.5	94.2	94.9	94.9	94.9	94.9	95.3	95.3	95.3	95.3	95.3	95.3	95.3
GE 1200	86.3	93.5	93.9	93.9	94.6	95.3	95.3	95.3	95.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7
GE 1000	86.6	93.9	94.2	94.2	94.9	95.0	95.0	95.0	95.0	95.4	95.4	95.4	95.4	95.4	95.4	95.4
GE 900	87.4	95.3	95.7	95.7	96.4	97.5	97.5	97.5	97.5	97.8	97.8	97.8	97.8	97.8	97.8	97.8
GE 800	87.4	95.0	96.4	96.4	97.1	98.2	98.6	98.6	98.6	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 700	87.4	96.4	96.8	96.8	97.5	98.6	98.9	98.9	98.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 600	87.4	96.4	96.8	96.8	97.5	98.6	98.9	98.9	98.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 500	87.4	96.4	96.8	96.8	97.5	98.6	98.9	98.9	98.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 400	87.4	96.4	96.8	96.8	97.5	98.6	98.9	98.9	98.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 300	87.4	96.4	96.8	96.8	97.5	98.6	98.9	98.9	98.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 200	87.4	96.4	96.8	96.8	97.5	98.6	98.9	98.9	98.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 100	87.4	96.4	96.8	96.8	97.5	98.6	98.9	98.9	98.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS: 277

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP HOURS (LST): 2100-2300

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 200	GE 300	GE 600	GE 400	GE 400	GE 320	GE 240	GE 200	GE 160	GE 120	GE 100	GE 80	GE 50	GE 40	GE 0
NO CEIL	19.5	19.2	19.2	19.5	19.5	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
GE 20000	21.2	22.2	22.2	22.6	22.6	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
GE 18000	21.2	22.2	22.2	22.6	22.6	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
GE 16000	21.2	22.2	22.2	22.6	22.6	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
GE 14000	21.2	22.2	22.2	22.6	22.6	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
GE 12000	21.2	22.2	22.2	22.6	22.6	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
GE 10000	32.0	33.3	33.3	34.0	34.0	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3
GE 9000	32.0	33.3	33.3	34.0	34.0	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3
GE 8000	32.0	33.3	33.3	34.0	34.0	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3
GE 7000	32.0	33.3	33.3	34.0	34.0	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3
GE 6000	33.3	34.7	34.7	35.4	35.4	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7
GE 5000	34.0	35.4	35.4	36.0	36.7	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0
GE 4500	35.7	37.4	37.4	38.0	38.7	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1
GE 4000	41.4	43.4	43.4	44.1	44.8	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1
GE 3500	43.8	45.8	45.8	46.5	47.1	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
GE 3000	47.8	49.6	49.6	50.5	51.2	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
GE 2500	62.4	72.1	72.1	72.7	73.4	74.4	74.4	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
GE 2000	71.7	76.1	76.1	76.8	77.4	78.5	78.5	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
GE 1800	72.1	76.4	76.4	77.1	77.8	78.8	78.8	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1
GE 1600	74.7	79.5	79.5	80.1	80.8	81.8	81.8	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
GE 1400	82.8	91.2	91.2	92.3	93.3	94.3	94.3	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
GE 1200	83.5	92.3	92.3	93.3	94.3	95.3	95.3	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
GE 1000	84.2	93.3	93.3	94.3	95.6	96.6	96.6	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
GE 900	84.2	93.6	93.6	94.6	96.0	97.0	97.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 800	84.2	93.6	93.6	94.9	96.3	97.3	97.3	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
GE 700	84.2	93.9	94.3	95.6	97.0	98.0	98.0	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 600	84.2	94.3	94.6	96.3	97.3	98.3	98.3	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
GE 500	84.2	94.3	94.6	96.3	97.6	98.7	98.7	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 400	84.2	94.3	94.6	96.3	97.6	98.7	98.7	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 300	84.2	94.3	94.6	96.3	97.6	98.7	98.7	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 200	84.2	94.3	94.6	96.3	97.6	98.7	98.7	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 100	84.2	94.3	94.6	96.3	97.6	98.7	98.7	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.7
GE 0	84.2	94.3	94.6	96.3	97.6	98.7	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS: 277

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86

MONTH: SEP HOURS(IST): ALL

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN FEET	1	GE 160	GE 90	GE 80	GE 60	GE 48	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	1	14.9	16.2	16.4	16.7	16.9	17.0	17.0	17.0	17.1	17.1	17.2	17.2	17.2	17.3	17.3	17.3
GE 20000	1	16.4	17.9	18.1	18.4	18.6	18.7	18.7	18.7	18.8	18.6	18.9	18.9	18.9	19.0	19.0	19.0
GE 18000	1	16.4	17.9	18.1	18.4	18.6	18.7	18.7	18.7	18.8	18.6	18.9	18.9	18.9	19.0	19.0	19.0
GE 16000	1	16.4	17.9	18.1	18.4	18.6	18.7	18.7	18.7	18.8	18.6	18.9	18.9	18.9	19.0	19.0	19.0
GE 14000	1	16.4	17.9	18.1	18.4	18.6	18.7	18.7	18.7	18.8	18.6	18.9	18.9	18.9	19.0	19.0	19.0
GE 12000	1	16.4	17.9	18.1	18.4	18.6	18.7	18.7	18.7	18.8	18.6	18.9	18.9	18.9	19.0	19.0	19.0
GE 10000	1	27.0	29.8	30.2	30.6	30.9	31.4	31.5	31.7	32.0	32.0	32.1	32.1	32.2	32.2	32.2	32.2
GE 9000	1	27.0	29.8	30.2	30.6	30.9	31.4	31.5	31.7	32.0	32.0	32.1	32.1	32.2	32.2	32.2	32.2
GE 8000	1	27.0	29.8	30.2	30.6	30.9	31.4	31.5	31.7	32.0	32.0	32.1	32.1	32.2	32.2	32.2	32.2
GE 7000	1	27.0	29.8	30.2	30.6	30.9	31.4	31.5	31.7	32.0	32.0	32.1	32.1	32.2	32.2	32.2	32.2
GE 6000	1	27.4	30.1	30.6	31.0	31.3	31.8	31.9	32.1	32.4	32.4	32.5	32.5	32.5	32.6	32.6	32.6
GE 5000	1	28.2	31.0	31.4	31.9	32.3	32.8	32.9	33.1	33.4	33.4	33.5	33.5	33.5	33.6	33.6	33.6
GE 4500	1	29.4	32.2	32.6	33.1	33.5	34.0	34.1	34.3	34.6	34.6	34.7	34.7	34.8	34.8	34.8	34.8
GE 4000	1	35.3	39.7	39.3	39.8	40.4	40.9	41.0	41.2	41.5	41.5	41.6	41.6	41.7	41.7	41.7	41.7
GE 3500	1	37.4	40.8	41.5	42.0	42.6	43.1	43.2	43.4	43.7	43.7	43.8	43.8	43.9	43.9	43.9	43.9
GE 3000	1	39.5	43.3	43.7	44.4	45.0	45.6	45.6	45.8	46.1	46.1	46.2	46.2	46.3	46.3	46.3	46.3
GE 2500	1	59.3	64.7	65.5	66.4	67.0	67.7	67.9	68.2	68.5	68.7	68.7	68.9	68.9	68.9	68.9	68.9
GE 2000	1	61.4	63.1	63.0	63.9	64.6	65.3	65.4	65.7	66.0	66.0	66.1	66.2	66.3	66.3	66.3	66.3
GE 1800	1	62.7	64.6	64.5	65.4	66.1	66.8	66.9	67.2	67.5	67.5	67.6	67.7	67.8	67.8	67.8	67.8
GE 1600	1	65.1	67.4	67.3	68.2	69.0	69.7	69.8	70.1	70.4	70.4	70.5	70.6	70.7	70.7	70.7	70.7
GE 1400	1	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6
GE 1200	1	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
GE 1000	1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
GE 900	1	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6
GE 800	1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
GE 600	1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
GE 500	1	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2
GE 400	1	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2
GE 300	1	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2
GE 200	1	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2
GE 100	1	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2
GE 0	1	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2

TOTAL NUMBER OF OBSERVATIONS: 2284

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MUKMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS (LST): 0000-0200

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24	30
NO CEIL	15.8	16.8	16.9	17.8	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1
GE 2000	17.8	18.8	18.8	19.8	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
GE 1800	17.8	18.8	18.8	19.8	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
GE 1600	17.8	18.8	18.8	19.8	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
GE 1400	17.8	18.8	18.8	19.8	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
GE 1200	17.8	18.8	18.8	19.8	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
GE 1000	26.2	28.5	28.5	29.5	29.9	29.9	29.9	29.9	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
GE 900	26.2	28.5	28.5	29.5	29.9	29.9	29.9	29.9	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
GE 800	26.2	28.5	28.5	29.5	29.9	29.9	29.9	29.9	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
GE 700	26.2	28.5	28.5	29.5	29.9	29.9	29.9	29.9	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
GE 600	26.2	28.5	28.5	29.5	29.9	29.9	29.9	29.9	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
GE 500	27.2	30.5	30.5	31.5	31.9	31.9	31.9	31.9	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
GE 450	30.2	32.9	32.9	33.9	34.2	34.2	34.2	34.2	34.9	34.9	34.9	34.9	34.9	34.9	34.9	34.9	34.9
GE 400	34.9	37.9	37.9	39.3	39.6	39.6	39.6	39.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6
GE 350	36.2	39.3	39.3	40.6	40.9	40.9	40.9	40.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
GE 300	38.9	41.9	41.9	43.3	43.6	43.6	43.6	43.6	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9
GE 250	51.0	56.4	56.4	58.7	59.1	59.1	59.1	59.1	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
GE 200	55.4	61.1	61.1	63.8	64.1	64.1	64.1	64.1	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
GE 180	56.4	62.1	62.1	64.8	65.1	65.1	65.1	65.1	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8
GE 160	59.4	66.1	66.1	68.5	69.1	69.1	69.1	69.1	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
GE 150	71.8	80.9	81.2	84.6	84.9	84.9	84.9	84.9	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2
GE 100	73.5	82.6	82.9	87.2	87.6	87.6	87.6	87.6	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
GE 90	74.2	83.6	83.9	88.6	88.9	88.9	88.9	88.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
GE 80	74.5	84.2	84.6	88.9	89.3	89.3	89.3	89.3	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
GE 70	74.8	84.9	85.2	89.6	89.9	89.9	89.9	89.9	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
GE 60	75.5	85.9	86.2	90.6	90.9	90.9	90.9	90.9	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
GE 50	75.8	86.2	86.6	90.9	91.3	91.3	91.3	91.3	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
GE 40	75.8	86.6	86.9	91.3	91.6	91.6	91.6	91.6	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
GE 30	75.8	86.6	86.9	91.3	91.6	91.6	91.6	91.6	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
GE 20	75.8	86.6	86.9	91.3	91.6	91.6	91.6	91.6	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
GE 10	75.8	86.6	86.9	91.3	91.6	91.6	91.6	91.6	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
GE 0	75.8	86.6	86.9	91.3	91.6	91.6	91.6	91.6	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0

TOTAL NUMBER OF OBSERVATIONS: 298

GLOBAL CLIMATOLOGY BRANCH
USAF/TAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271132 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS(LST): 0300-0500

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN FEET	GT 160	GE 90	GE 40	GE 60	GE 48	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0	
NO CEIL	15.9	17.3	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.9	17.9	17.9	17.9	
GE 0000	16.6	18.3	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	19.3	19.3	19.3	19.3	
GE 1600	16.6	18.3	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	19.3	19.3	19.3	19.3	
GE 1000	16.6	18.3	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	19.3	19.3	19.3	19.3	
GE 1400	16.6	18.3	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	19.3	19.3	19.3	19.3	
GE 1200	16.6	18.3	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	19.3	19.3	19.3	19.3	
GE 10000	24.9	26.9	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.9	27.9	27.9	27.9	
GE 9000	24.9	26.9	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.9	27.9	27.9	27.9	
GE 8000	24.9	26.9	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.9	27.9	27.9	27.9	
GE 7000	24.9	26.9	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.9	27.9	27.9	27.9	
GE 6000	24.9	26.9	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.9	27.9	27.9	27.9	
GE 5000	26.9	29.2	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	30.2	30.2	30.2	30.2	
GE 4000	26.9	29.2	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	30.2	30.2	30.2	30.2	
GE 3000	31.9	34.6	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.5	35.5	35.5	35.5	
GE 2000	34.9	37.5	38.2	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.9	38.9	38.9	38.9	
GE 1000	37.9	40.9	41.5	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	42.2	42.2	42.2	42.2	
GE 20000	50.2	55.5	56.5	57.1	57.1	57.1	58.1	58.8	58.8	59.1	59.1	59.1	59.5	59.5	59.5	59.5	
GE 18000	52.2	57.5	58.5	59.1	59.1	59.1	60.1	60.8	60.8	61.1	61.1	61.1	61.5	61.5	61.5	61.5	
GE 16000	53.5	59.1	60.1	60.8	60.8	60.8	61.8	62.5	62.5	62.8	62.8	62.8	63.1	63.1	63.1	63.1	
GE 14000	57.1	63.5	64.5	65.1	65.1	65.1	66.1	66.8	66.8	67.1	67.1	67.1	67.4	67.4	67.4	67.4	
GE 12000	69.1	74.7	79.7	82.1	82.7	83.4	84.7	86.4	86.7	87.4	87.4	87.4	87.7	87.7	87.7	87.7	
GE 10000	71.1	81.4	82.4	84.7	85.7	86.4	87.7	89.4	89.7	90.4	90.4	90.4	90.7	90.7	90.7	90.7	
GE 9000	71.1	82.1	83.1	86.0	87.0	87.7	89.0	90.7	91.0	91.7	91.7	91.7	92.0	92.0	92.0	92.0	
GE 8000	72.1	83.1	84.1	87.0	88.0	88.7	90.0	91.7	92.0	92.7	92.7	92.7	93.0	93.0	93.0	93.0	
GE 7000	72.8	84.4	85.4	88.4	89.4	90.0	91.4	93.0	93.4	94.0	94.0	94.0	94.4	94.4	94.4	94.4	
GE 6000	72.8	84.4	85.4	89.0	90.4	91.0	92.4	94.0	94.4	95.0	95.0	95.0	95.3	95.3	95.3	95.3	
GE 5000	72.8	84.4	85.4	89.4	90.7	91.7	93.0	94.7	95.0	95.7	95.7	95.7	96.0	96.0	96.0	96.0	
GE 4000	72.8	84.7	85.7	90.0	91.4	92.4	94.0	95.7	96.0	96.7	96.7	96.7	97.0	97.0	97.0	97.0	
GE 3000	72.8	84.7	86.0	90.4	91.7	92.7	94.4	96.3	96.7	97.3	97.3	97.3	97.7	97.7	97.7	97.7	
GE 2000	72.8	84.7	86.0	90.4	91.7	92.7	94.4	96.3	96.7	97.3	97.3	97.3	98.3	98.7	98.7	98.7	
GE 1000	72.8	84.7	86.0	90.4	91.7	92.7	94.4	96.3	96.7	97.3	97.3	97.3	98.3	99.0	99.3	100.0	
GE 0	72.8	84.7	86.0	90.4	91.7	92.7	94.4	96.3	96.7	97.3	97.3	97.3	98.3	99.0	99.3	100.0	

TOTAL NUMBER OF OBSERVATIONS: 731

GLOBAL CLIMATOLOGY BRANCH
USAF/CLAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221157 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS(IST): 0600-0800

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO CLIL	16.7	17.7	17.7	17.7	18.0	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.7
GE 20000	17.7	18.7	18.7	18.7	19.0	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.7
GE 18000	17.7	18.7	18.7	18.7	19.0	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.7
GE 16000	17.7	18.7	18.7	18.7	19.0	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.7
GE 14000	17.7	18.7	18.7	18.7	19.0	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.7
GE 12000	17.7	18.7	18.7	18.7	19.0	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.7
GE 10000	26.2	28.6	28.6	28.9	29.3	29.9	29.9	30.3	30.6	30.6	30.6	30.6	30.6	30.6	30.6	31.0
GE 9000	26.2	28.6	28.6	28.9	29.3	29.9	29.9	30.3	30.6	30.6	30.6	30.6	30.6	30.6	30.6	31.0
GE 8000	26.2	28.6	28.6	28.9	29.3	29.9	29.9	30.3	30.6	30.6	30.6	30.6	30.6	30.6	30.6	31.0
GE 7000	26.2	28.6	28.6	28.9	29.3	29.9	29.9	30.3	30.6	30.6	30.6	30.6	30.6	30.6	30.6	31.0
GE 6000	26.2	28.6	28.6	28.9	29.3	29.9	29.9	30.3	30.6	30.6	30.6	30.6	30.6	30.6	30.6	31.0
GE 5000	27.6	30.3	30.3	30.6	31.0	31.6	31.6	32.0	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.7
GE 4500	28.6	31.3	31.3	31.6	32.0	32.7	32.7	33.0	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.7
GE 4000	31.3	34.0	34.0	34.4	34.7	35.4	35.4	35.7	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.7
GE 3500	32.3	35.0	35.0	35.4	35.7	36.1	36.1	36.7	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.7
GE 3000	35.7	39.4	39.4	39.7	39.9	40.1	40.1	40.5	40.9	40.9	40.9	40.9	40.9	40.9	40.9	41.5
GE 2500	48.0	52.7	53.7	54.4	55.1	56.5	56.5	57.5	57.8	57.8	57.8	57.8	57.8	57.8	57.8	58.5
GE 2000	49.0	54.1	55.1	55.8	56.5	57.8	57.8	58.2	58.8	58.8	58.8	58.8	58.8	58.8	58.8	59.9
GE 1800	50.2	55.4	56.5	57.1	57.8	59.2	59.5	60.2	60.5	60.5	60.5	60.5	60.5	60.5	60.5	61.2
GE 1500	53.1	58.4	59.9	60.5	61.2	62.6	62.9	63.6	63.9	63.9	63.9	63.9	63.9	63.9	63.9	64.6
GE 1200	63.9	74.1	75.9	77.9	80.3	82.0	82.3	83.0	84.0	84.4	84.4	84.4	84.4	84.4	84.4	85.4
GE 1000	67.0	77.6	79.3	81.6	84.0	85.7	86.1	86.7	87.8	88.1	88.1	88.1	88.1	88.1	88.1	89.1
GE 900	68.4	79.6	81.3	83.7	86.1	87.8	88.1	88.6	89.8	90.1	90.1	90.1	90.1	90.1	90.1	91.2
GE 800	69.0	80.3	82.0	84.4	86.7	88.4	88.8	89.5	90.5	90.8	90.8	90.8	90.8	90.8	90.8	91.8
GE 700	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5
GE 600	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5
GE 500	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5
GE 400	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5
GE 300	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5
GE 200	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5
GE 100	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5
GE 50	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5
GE 20	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5
GE 10	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5
GE 5	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5
GE 2	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5
GE 1	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5
GE 0	69.7	81.3	82.7	85.0	87.5	89.5	89.8	90.5	92.2	92.5	92.5	92.5	92.5	92.5	92.5	93.5

TOTAL NUMBER OF OBSERVATIONS: 294

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 271137 STATION NAME: MURMANSK LSSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS(IST): 0900-1100

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 400	GE 600	GE 800	GE 1000	GE 1200	GE 1400	GE 1600	GE 1800	GE 2000	GE 2200	GE 2400	GE 2600	GE 2800	GE 3000	GE 3200
NO CEIL	11.3	12.6	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
GE 20000	14.0	15.3	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
GE 18000	14.0	15.3	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
GE 16000	14.0	15.3	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
GE 14000	14.0	15.3	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
GE 12000	14.0	15.3	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
GE 10000	22.6	25.6	26.2	26.2	26.6	27.2	27.2	27.2	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9
GE 9000	22.6	25.6	26.2	26.2	26.6	27.2	27.2	27.2	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9
GE 8000	22.6	25.6	26.2	26.2	26.6	27.2	27.2	27.2	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9
GE 7000	22.6	25.6	26.2	26.2	26.6	27.2	27.2	27.2	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9
GE 6000	22.6	25.6	26.2	26.2	26.6	27.2	27.2	27.2	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9
GE 5000	23.3	26.2	26.6	26.9	27.2	27.9	27.9	27.9	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6
GE 4500	24.7	27.6	28.2	28.2	28.6	29.2	29.2	29.2	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9
GE 4000	27.2	30.2	30.9	30.9	31.2	31.9	31.9	31.9	32.6	33.2	33.2	33.2	33.2	33.2	33.2	33.2
GE 3500	27.9	31.2	31.9	31.9	32.2	33.2	33.2	33.9	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6
GE 3000	28.9	32.2	32.9	32.9	33.6	34.6	34.9	35.5	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2
GE 2500	40.7	46.5	47.9	48.8	49.3	51.2	51.8	52.5	53.8	53.8	53.8	53.8	53.8	53.8	53.8	54.2
GE 2000	43.7	49.2	50.5	51.8	52.5	54.2	54.8	55.5	56.8	56.8	56.8	56.8	56.8	56.8	56.8	57.1
GE 1800	44.2	50.2	51.5	52.8	53.5	55.1	55.8	56.5	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.5
GE 1600	45.2	51.2	52.5	53.8	54.8	56.1	56.5	57.5	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.5
GE 1400	59.1	70.1	72.1	74.3	76.1	78.1	79.1	80.7	83.7	84.4	84.4	84.4	84.4	84.7	84.7	85.0
GE 1200	61.5	73.4	76.1	78.7	80.1	82.4	83.4	85.0	88.0	88.7	88.7	88.7	88.7	89.0	89.0	89.4
GE 900	61.5	73.4	76.1	79.1	80.4	82.7	83.7	85.7	88.7	89.4	89.4	89.4	89.4	89.7	89.7	90.0
GE 800	61.5	74.4	77.1	80.1	81.4	83.7	84.7	87.0	90.0	90.7	90.7	90.7	90.7	91.0	91.0	91.4
GE 700	62.1	74.8	77.4	80.4	81.7	84.1	85.4	87.7	91.4	92.0	92.0	92.0	92.0	92.4	92.4	92.7
GE 600	62.1	74.8	77.4	80.4	81.7	84.1	85.4	88.0	91.7	92.4	92.4	92.4	92.4	92.7	92.7	93.0
GE 500	62.1	74.8	77.4	80.4	81.7	84.1	85.4	88.0	91.7	92.4	92.4	92.4	92.4	92.7	92.7	93.0
GE 400	62.5	75.1	77.7	81.4	82.7	85.4	87.0	90.4	94.0	95.0	95.0	95.0	95.0	95.3	95.3	95.7
GE 300	62.5	75.1	77.7	81.4	82.7	85.4	87.0	90.4	94.0	95.0	95.0	95.0	95.0	95.3	95.3	95.7
GE 200	62.5	75.4	78.1	81.7	83.1	85.7	87.4	91.0	94.7	95.7	95.7	95.7	95.7	96.7	97.0	97.7
GE 100	62.5	75.7	78.4	82.1	83.4	86.0	87.7	91.4	95.0	96.0	96.0	96.0	96.0	97.0	97.7	98.3
GE 0	62.5	75.7	78.4	82.1	83.4	86.0	87.7	91.4	95.0	96.0	96.0	96.0	96.0	97.0	97.7	100.0

TOTAL NUMBER OF OBSERVATIONS: 321

GLOBAL CLIMATOLOGY BRANCH
USAF/CLAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS(LST): 1200-1400

CEILING FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO CEIL	15.2	15.9	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
GE 1000	16.6	17.3	18.0	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
GE 1800	16.6	17.3	18.0	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
GE 1600	16.6	17.3	18.0	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
GE 1400	16.6	17.3	18.0	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
GE 1200	16.6	17.3	18.0	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
GE 1000	29.4	29.8	30.4	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
GE 900	29.4	29.8	30.4	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
GE 800	29.4	29.8	30.4	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
GE 700	29.4	29.8	30.4	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
GE 600	29.4	29.8	30.4	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
GE 500	29.4	29.8	30.4	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
GE 400	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
GE 300	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
GE 200	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
GE 100	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
GE 0	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
GE 1000	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
GE 900	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
GE 800	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
GE 700	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
GE 600	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
GE 500	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
GE 400	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
GE 300	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
GE 200	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
GE 100	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
GE 0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
GE 1000	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 900	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 800	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 700	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 600	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 500	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 400	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 300	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 200	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 100	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 0	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 1000	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
GE 900	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
GE 800	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
GE 700	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
GE 600	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
GE 500	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
GE 400	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
GE 300	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
GE 200	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
GE 100	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
GE 0	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6

TOTAL NUMBER OF OBSERVATIONS: 739

GENERAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 22113 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS(IST): 1500-1700

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 100	GE 200	GE 300	GE 400	GE 500	GE 600	GE 700	GE 800	GE 900	GE 1000	GE 1200	GE 1400	GE 1600	GE 1800	GE 2000	GE 2500
NO CEIL	16.7	17.5	17.5	17.7	17.7	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
GE 30000	19.0	19.7	19.7	20.3	20.3	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
GE 18000	19.0	19.7	19.7	20.3	20.3	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
GE 16000	19.0	19.7	19.7	20.3	20.3	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
GE 14000	19.0	19.7	19.7	20.3	20.3	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
GE 12000	19.0	19.7	19.7	20.3	20.3	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
GE 10000	26.2	28.5	28.5	29.2	29.5	30.8	30.8	30.8	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
GE 9000	26.2	28.5	28.5	29.2	29.5	30.8	30.8	30.8	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
GE 8000	26.2	28.5	28.5	29.2	29.5	30.8	30.8	30.8	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
GE 7000	26.2	28.5	28.5	29.2	29.5	30.8	30.8	30.8	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
GE 6000	26.2	28.5	28.5	29.2	29.5	30.8	30.8	30.8	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
GE 5000	27.5	29.8	29.8	30.5	30.8	32.1	32.1	32.1	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5
GE 4500	27.5	29.8	29.8	30.5	30.8	32.1	32.1	32.1	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5
GE 4000	31.1	33.4	33.4	34.4	34.4	36.1	36.1	36.1	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4
GE 3500	32.5	34.8	34.8	36.1	36.4	37.7	37.7	37.7	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
GE 3000	34.8	37.4	37.4	38.7	39.0	40.3	40.3	40.3	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
GE 2500	48.5	50.1	50.1	55.7	55.9	59.0	59.3	59.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
GE 2000	57.5	56.7	57.4	58.4	59.0	61.6	62.0	62.0	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
GE 1800	57.5	57.7	58.4	59.3	60.0	63.0	63.3	63.3	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
GE 1600	58.4	60.3	61.0	62.0	62.6	65.6	65.9	65.9	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6
GE 1400	69.2	77.7	80.7	82.3	83.0	85.9	86.2	87.2	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9
GE 1200	69.8	80.0	83.0	84.9	85.6	88.5	88.9	89.8	90.8	90.8	90.8	91.5	91.5	91.5	91.8	92.1
GE 1000	70.8	83.9	84.9	86.9	87.5	90.5	90.8	91.8	92.8	92.8	92.8	93.4	93.4	93.4	93.8	94.1
GE 900	70.8	83.9	84.9	86.9	87.5	90.5	90.8	91.8	92.8	92.8	92.8	93.4	93.4	93.4	93.8	94.1
GE 800	71.1	84.6	87.2	89.2	89.8	92.8	93.4	94.1	95.1	95.1	95.1	95.7	95.7	95.7	96.0	96.0
GE 700	71.1	84.6	87.2	89.2	89.8	92.8	93.4	94.1	95.1	95.1	95.1	95.7	95.7	95.7	96.0	96.0
GE 600	71.1	84.6	87.2	89.2	89.8	92.8	93.4	94.1	95.1	95.1	95.1	95.7	95.7	95.7	96.0	96.0
GE 500	71.1	84.6	87.2	89.2	89.8	92.8	93.4	94.1	95.1	95.1	95.1	95.7	95.7	95.7	96.0	96.0
GE 400	71.1	84.6	87.2	89.2	89.8	92.8	93.4	94.1	95.1	95.1	95.1	95.7	95.7	95.7	96.0	96.0
GE 300	71.1	84.6	87.2	89.2	89.8	92.8	93.4	94.1	95.1	95.1	95.1	95.7	95.7	95.7	96.0	96.0
GE 200	71.1	84.6	87.2	89.2	89.8	92.8	93.4	94.1	95.1	95.1	95.1	95.7	95.7	95.7	96.0	96.0
GE 100	71.1	84.6	87.2	89.2	89.8	92.8	93.4	94.1	95.1	95.1	95.1	95.7	95.7	95.7	96.0	96.0

TOTAL NUMBER OF OBSERVATIONS: 325

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221131 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT HOURS(LST): 1800-2000

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
1	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO DATA	19.2	19.3	19.7	19.6	19.4	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7
GE 20000	16.3	19.4	19.7	20.1	20.4	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
GE 18000	16.3	19.4	19.7	20.1	20.4	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
GE 16000	16.3	19.4	19.7	20.1	20.4	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
GE 14000	16.3	19.4	19.7	20.1	20.4	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
GE 12000	16.3	19.4	19.7	20.1	20.4	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
GE 10000	25.6	29.1	29.4	29.8	30.1	30.8	30.8	31.1	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
GE 9000	25.6	29.1	29.4	29.8	30.1	30.8	30.8	31.1	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
GE 8000	25.6	29.1	29.4	29.8	30.1	30.8	30.8	31.1	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
GE 7000	25.6	29.1	29.4	29.8	30.1	30.8	30.8	31.1	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
GE 6000	25.6	29.1	29.4	29.8	30.1	30.8	30.8	31.1	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
GE 5000	26.4	30.1	30.4	30.8	31.1	31.8	31.8	32.2	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5
GE 4500	27.7	30.4	30.8	31.1	31.5	32.2	32.2	32.5	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
GE 4000	30.9	34.3	34.6	35.6	36.2	37.0	37.0	37.4	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7
GE 3500	32.0	35.6	36.6	37.0	37.4	38.4	38.4	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1
GE 3000	34.0	40.1	40.5	41.5	41.7	42.9	42.9	43.3	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6
GE 2500	49.4	50.6	54.0	55.4	55.7	57.1	57.4	58.5	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8
GE 2000	47.5	55.7	56.1	57.4	57.8	59.2	59.5	60.9	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
GE 1800	52.6	59.2	59.5	60.9	61.2	63.0	63.3	64.7	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
GE 1600	55.0	62.3	62.6	64.0	64.4	66.1	66.4	67.5	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
GE 1400	67.8	74.5	74.8	81.7	82.0	85.5	85.8	87.5	88.9	89.0	89.0	89.0	89.0	89.0	89.0	89.0
GE 1200	68.9	79.9	81.7	83.7	84.1	87.5	87.9	89.6	91.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
GE 1000	69.2	81.0	82.0	84.3	85.1	88.6	88.9	91.0	92.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
GE 900	69.7	81.3	82.4	85.1	85.8	89.3	89.6	91.7	93.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
GE 800	69.6	82.7	84.1	87.2	88.2	91.7	92.0	94.1	95.8	97.2	97.2	97.2	97.2	97.2	97.2	97.2
GE 700	69.9	83.0	84.4	87.9	88.4	92.4	92.7	94.8	96.5	97.9	97.9	97.9	97.9	97.9	97.9	97.9
GE 600	69.9	83.0	84.4	87.9	88.4	92.4	92.7	94.8	96.5	97.9	97.9	97.9	97.9	97.9	97.9	97.9
GE 500	69.9	83.0	84.4	87.9	88.4	92.4	92.7	94.8	96.5	97.9	97.9	97.9	97.9	97.9	97.9	97.9
GE 400	69.9	83.0	84.4	87.9	88.4	92.4	92.7	94.8	96.5	97.9	97.9	97.9	97.9	97.9	97.9	97.9
GE 300	69.9	83.0	84.4	87.9	88.4	92.4	92.7	94.8	96.5	97.9	97.9	97.9	97.9	97.9	97.9	97.9
GE 200	69.9	83.0	84.4	87.9	88.4	92.4	92.7	94.8	96.5	97.9	97.9	97.9	97.9	97.9	97.9	97.9
GE 100	69.9	83.0	84.4	87.9	88.4	92.4	92.7	94.8	96.5	97.9	97.9	97.9	97.9	97.9	97.9	97.9
GE 0	69.9	83.0	84.4	87.9	88.4	92.4	92.7	94.8	96.5	97.9	97.9	97.9	97.9	97.9	97.9	97.9

TOTAL NUMBER OF OBSERVATIONS: 249

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AFR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86

MONTH: OCT HOURS(IST): 2100-2300

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
100	90	80	70	60	50	40	30	20	10	0	0	0	0	0	0	0
NO CEIL	19.1	19.8	20.1	20.8	21.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1
GE 20000	20.1	20.4	21.1	21.8	22.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1
GE 18000	20.1	20.8	21.1	21.8	22.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1
GE 16000	20.1	20.8	21.1	21.8	22.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1
GE 14000	20.1	20.8	21.1	21.8	22.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1
GE 12000	20.1	20.8	21.1	21.8	22.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1
GE 10000	26.7	27.7	28.1	28.7	29.0	30.0	30.0	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4
GE 9000	26.7	27.7	28.1	28.7	29.0	30.0	30.0	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4
GE 8000	26.7	27.7	28.1	28.7	29.0	30.0	30.0	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4
GE 7000	26.7	27.7	28.1	28.7	29.0	30.0	30.0	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4
GE 6000	26.7	27.7	28.1	28.7	29.0	30.0	30.0	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4
GE 5000	27.7	28.7	29.0	29.7	30.0	31.0	31.0	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4
GE 4500	29.7	29.7	30.0	30.7	31.0	32.0	32.0	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
GE 4000	35.6	35.6	37.0	38.0	38.3	39.3	39.3	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6
GE 3500	38.0	38.9	39.3	40.3	40.6	41.6	41.6	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
GE 3000	41.3	42.2	42.6	43.6	43.9	44.9	44.9	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
GE 2500	50.1	54.8	55.1	56.4	56.4	57.8	57.8	58.1	58.1	58.4	58.4	58.4	58.4	58.4	58.4	58.4
GE 2000	56.8	59.7	60.1	61.4	61.7	62.7	62.7	63.0	63.0	63.4	63.4	63.4	63.4	63.4	63.4	63.4
GE 1800	57.8	60.7	61.1	62.4	62.7	63.7	63.7	64.0	64.0	64.4	64.4	64.4	64.4	64.4	64.4	64.4
GE 1600	60.7	62.7	64.0	65.3	65.7	66.7	66.7	67.0	67.0	67.3	67.3	67.3	67.3	67.3	67.3	67.3
GE 1400	72.3	73.9	74.9	82.2	83.5	85.5	86.1	87.1	88.1	89.1	89.1	89.4	89.4	89.4	89.4	89.4
GE 1200	73.9	80.9	81.8	84.2	85.8	87.8	88.4	89.4	90.4	91.4	91.4	91.7	91.7	91.7	91.7	91.7
GE 1000	74.3	81.5	82.8	85.1	86.8	88.8	89.4	90.4	91.7	92.7	92.7	93.1	93.1	93.1	93.1	93.1
GE 800	74.9	82.2	83.5	85.3	87.5	89.4	90.1	91.1	92.4	93.4	93.4	93.7	93.7	93.7	93.7	93.7
GE 700	76.2	83.6	85.5	87.8	89.4	91.4	92.1	93.1	94.4	95.4	95.4	95.7	95.7	95.7	95.7	95.7
GE 600	76.6	84.2	85.8	88.1	89.8	91.7	92.4	93.4	94.7	95.7	95.7	96.0	96.0	96.0	96.0	96.0
GE 500	76.6	84.2	85.8	88.1	89.8	91.7	92.4	93.7	95.0	96.0	96.0	96.4	96.4	96.4	96.4	96.4
GE 400	76.6	84.5	86.5	88.8	90.4	92.4	93.7	95.0	96.7	98.0	98.0	98.3	98.3	98.3	98.3	98.3
GE 300	76.6	84.5	86.5	88.8	90.4	92.4	93.7	95.0	96.7	98.0	98.0	98.3	98.3	98.3	98.3	98.3
GE 200	76.6	84.5	86.5	88.8	90.4	92.4	93.7	95.0	96.7	98.0	98.0	98.3	98.3	98.3	98.3	98.3
GE 100	76.6	84.5	86.5	88.8	90.4	92.4	93.7	95.0	96.7	98.0	98.0	98.3	98.3	98.3	98.3	98.3
GE 0	76.6	84.5	86.5	88.8	90.4	92.4	93.7	95.0	96.7	98.0	98.0	98.3	98.3	98.3	98.3	98.3

TOTAL NUMBER OF OBSERVATIONS: 303

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86

MONTH: OCT HOURS(LST): ALL

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO CEIL	15.6	16.9	17.2	17.5	17.7	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1	18.1	18.2
GE 2000	17.3	18.5	18.9	19.2	19.4	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.9
GE 1800	17.3	18.5	18.9	19.2	19.4	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.9
GE 1600	17.3	18.5	18.9	19.2	19.4	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.9
GE 1400	17.3	18.5	18.9	19.2	19.4	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.9
GE 1200	17.3	18.5	18.9	19.2	19.4	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.9
GE 1000	25.8	28.1	28.4	28.9	29.2	29.7	29.7	29.9	30.2	30.2	30.2	30.3	30.3	30.3	30.3	30.3
GE 900	25.8	28.1	28.4	28.9	29.2	29.7	29.7	29.9	30.2	30.2	30.2	30.3	30.3	30.3	30.3	30.3
GE 800	25.8	28.1	28.4	28.9	29.2	29.7	29.7	29.9	30.2	30.2	30.2	30.3	30.3	30.3	30.3	30.3
GE 700	25.8	28.1	28.4	28.9	29.2	29.7	29.7	29.9	30.2	30.2	30.2	30.3	30.3	30.3	30.3	30.3
GE 600	25.8	28.1	28.4	28.9	29.2	29.7	29.7	29.9	30.2	30.2	30.2	30.3	30.3	30.3	30.3	30.3
GE 500	27.1	29.5	29.8	30.3	30.6	31.1	31.1	31.3	31.6	31.6	31.6	31.7	31.7	31.7	31.7	31.8
GE 400	28.0	30.4	30.8	31.3	31.6	32.1	32.1	32.3	32.5	32.5	32.5	32.6	32.6	32.6	32.6	32.7
GE 300	30.0	34.5	34.9	35.6	35.8	36.4	36.4	36.8	37.0	37.0	37.0	37.1	37.1	37.1	37.2	37.2
GE 200	33.6	36.2	36.6	37.4	37.6	38.3	38.3	38.6	38.9	38.9	38.9	39.0	39.0	39.0	39.1	39.1
GE 100	36.1	39.9	39.4	40.2	40.5	41.1	41.2	41.5	41.8	41.8	41.8	41.9	41.9	41.9	42.0	42.0
GE 2000	48.7	53.4	54.1	55.3	55.8	57.0	57.4	58.0	58.4	58.6	59.7	59.7	59.8	59.8	59.8	59.9
GE 1800	50.9	56.3	57.0	58.3	58.8	59.9	60.4	61.0	61.5	61.6	61.7	61.8	61.8	61.8	61.8	61.9
GE 1600	52.3	57.7	58.4	59.7	60.3	61.5	61.9	62.6	63.1	63.2	63.3	63.4	63.4	63.4	63.4	63.5
GE 1400	54.7	60.7	61.4	62.7	63.2	64.5	64.9	65.5	66.1	66.2	66.3	66.4	66.4	66.4	66.4	66.5
GE 1200	67.6	77.3	78.4	80.8	81.7	83.7	84.5	85.6	86.8	87.4	87.5	87.7	87.9	87.9	88.0	88.1
GE 1000	69.7	79.7	81.0	83.6	84.6	86.6	87.4	88.6	89.8	90.4	90.6	90.8	90.9	91.0	91.1	91.1
GE 900	69.7	79.7	81.0	83.6	84.6	86.6	87.4	88.6	89.8	90.4	90.6	90.8	90.9	91.0	91.1	91.1
GE 800	70.2	81.3	82.5	85.1	86.0	88.7	89.4	90.8	92.1	92.6	92.8	93.0	93.2	93.2	93.3	93.4
GE 700	70.9	82.4	84.1	86.8	88.1	90.1	90.9	92.4	93.9	94.6	94.8	95.0	95.2	95.3	95.3	95.4
GE 600	71.0	82.7	84.3	87.4	88.6	90.8	91.6	93.2	94.7	95.4	95.6	95.8	96.0	96.1	96.1	96.2
GE 500	71.1	82.8	84.4	87.5	88.7	91.0	91.9	93.6	95.1	95.9	96.1	96.3	96.4	96.5	96.6	96.6
GE 400	71.1	83.0	84.7	88.0	89.2	91.5	92.6	94.4	96.0	96.8	97.0	97.3	97.4	97.5	97.6	97.6
GE 300	71.2	83.1	84.8	88.2	89.4	91.7	92.8	94.7	96.3	97.2	97.4	97.6	97.8	97.9	97.9	98.0
GE 200	71.2	83.2	84.9	88.2	89.5	91.8	92.9	94.8	96.4	97.3	97.5	97.7	98.4	98.7	98.8	98.8
GE 100	71.2	83.2	84.9	88.2	89.5	91.8	92.9	94.8	96.4	97.3	97.5	97.7	98.4	99.0	99.2	100.0

TOTAL NUMBER OF OBSERVATIONS: 2360

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221120 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS(IST): 0000-0200

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 1	GE 2	GE 3	GE 4	GE 5	GE 6	GE 7	GE 8	GE 9	GE 10	GE 12	GE 14	GE 16	GE 18	GE 20	GE 25
NO CLIL	20.6	21.9	24.6	24.9	25.6	26.0	26.0	26.6	26.6	26.6	27.3	27.3	27.3	27.3	27.3	27.3
GE 20000	21.5	24.6	25.3	25.6	26.3	26.6	26.6	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
GE 18000	21.5	24.6	25.3	25.6	26.3	26.6	26.6	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
GE 16000	21.5	24.6	25.3	25.6	26.3	26.6	26.6	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
GE 14000	21.5	24.6	25.3	25.6	26.3	26.6	26.6	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
GE 12000	21.5	24.6	25.3	25.6	26.3	26.6	26.6	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
GE 10000	29.1	33.6	34.6	35.6	36.7	37.7	37.7	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1
GE 9000	29.1	33.6	34.6	35.6	36.7	37.7	37.7	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1
GE 8000	29.1	33.6	34.6	35.6	36.7	37.7	37.7	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1
GE 7000	29.1	33.6	34.6	35.6	36.7	37.7	37.7	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1
GE 6000	29.1	33.6	34.6	35.6	36.7	37.7	37.7	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1
GE 5000	29.8	34.3	35.3	36.7	37.7	38.8	38.8	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
GE 4500	30.4	34.9	36.3	37.4	38.4	39.4	39.4	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
GE 4000	33.2	37.4	37.4	40.5	41.4	43.3	43.3	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6
GE 3500	34.6	39.8	40.8	42.2	43.3	44.6	44.6	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0
GE 3000	36.7	41.9	42.9	44.3	45.3	46.7	46.7	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1
GE 2500	45.1	51.9	53.3	55.0	56.4	57.6	58.5	59.9	59.9	59.9	59.9	59.9	59.9	60.2	60.2	60.2
GE 2000	49.1	56.4	58.1	59.9	61.2	62.6	63.3	64.7	65.1	65.1	65.1	65.1	65.1	65.4	65.4	65.4
GE 1800	50.2	57.4	59.2	60.9	62.3	63.7	64.4	65.7	66.1	66.1	66.1	66.1	66.1	66.4	66.4	66.4
GE 1600	51.9	59.4	61.6	63.3	64.7	66.1	66.8	68.2	68.5	68.5	68.5	68.5	68.5	68.9	68.9	68.9
GE 1400	60.6	70.2	74.7	76.8	79.9	82.0	83.0	86.2	86.5	86.5	86.5	86.5	86.5	87.5	87.5	87.5
GE 1200	61.2	71.3	75.4	78.2	81.3	83.4	84.8	88.2	88.6	88.6	88.6	88.6	88.6	89.6	89.6	89.6
GE 1000	61.7	71.3	75.4	78.2	81.3	83.4	84.8	88.2	88.6	88.6	88.6	88.6	88.6	89.6	89.6	89.6
GE 900	61.7	71.3	75.4	78.2	81.3	83.4	84.8	88.2	88.6	88.6	88.6	88.6	88.6	89.6	89.6	89.6
GE 800	61.6	71.4	77.5	80.6	83.7	86.2	87.5	91.3	91.7	92.4	92.4	92.4	92.4	93.1	93.4	93.8
GE 700	61.6	71.4	77.5	80.6	83.7	86.2	87.5	91.3	91.7	92.4	92.4	92.4	92.4	93.1	93.4	93.8
GE 600	61.6	71.4	77.5	80.6	83.7	86.2	87.5	91.3	91.7	92.4	92.4	92.4	92.4	93.1	93.4	93.8
GE 500	61.6	71.4	77.5	80.6	83.7	86.2	87.5	91.3	91.7	92.4	92.4	92.4	92.4	93.1	93.4	93.8
GE 400	61.6	71.4	77.5	80.6	83.7	86.2	87.5	91.3	91.7	92.4	92.4	92.4	92.4	93.1	93.4	93.8
GE 300	61.6	71.4	77.5	80.6	83.7	86.2	87.5	91.3	91.7	92.4	92.4	92.4	92.4	93.1	93.4	93.8
GE 200	61.6	71.4	77.5	80.6	83.7	86.2	87.5	91.3	91.7	92.4	92.4	92.4	92.4	93.1	93.4	93.8
GE 100	61.6	71.4	77.5	80.6	83.7	86.2	87.5	91.3	91.7	92.4	92.4	92.4	92.4	93.1	93.4	93.8
GE 0	61.6	71.4	77.5	80.6	83.7	86.2	87.5	91.3	91.7	92.4	92.4	92.4	92.4	93.1	93.4	93.8

TOTAL NUMBER OF OBSERVATIONS: 289

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS(IST): 0300-0500

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 200	GE 240	GE 280	GE 320	GE 360	GE 400	GE 440	GE 480	GE 520	GE 560	GE 600	GE 640	GE 680	GE 720	GE 760
NO CLIL	20.0	22.1	23.4	23.4	23.4	23.8	24.1	24.5	24.8	25.2	25.2	25.2	25.5	25.5	25.5	25.5
GE 20000	20.3	22.4	23.4	23.8	23.8	24.1	24.5	24.8	25.2	25.5	25.5	25.5	25.9	25.9	25.9	25.9
GE 16000	20.7	22.4	23.3	23.8	23.4	24.1	24.5	24.8	25.2	25.5	25.5	25.5	25.9	25.9	25.9	25.9
GE 16000	20.3	22.4	23.4	23.8	23.8	24.1	24.5	24.8	25.2	25.5	25.5	25.5	25.9	25.9	25.9	25.9
GE 14000	20.3	22.4	23.8	23.8	23.8	24.1	24.5	24.8	25.2	25.5	25.5	25.5	25.9	25.9	25.9	25.9
GE 12000	20.3	22.4	23.8	23.8	23.8	24.1	24.5	24.8	25.2	25.5	25.5	25.5	25.9	25.9	25.9	25.9
GE 10000	29.0	32.4	34.1	34.1	34.1	34.5	35.5	36.6	37.2	37.6	37.6	37.6	37.9	37.9	37.9	37.9
GE 9000	29.0	32.4	34.1	34.1	34.1	34.5	35.5	36.6	37.2	37.6	37.6	37.6	37.9	37.9	37.9	37.9
GE 8000	29.0	32.4	34.1	34.1	34.1	34.5	35.5	36.6	37.2	37.6	37.6	37.6	37.9	37.9	37.9	37.9
GE 7000	29.0	32.4	34.1	34.1	34.1	34.5	35.5	36.6	37.2	37.6	37.6	37.6	37.9	37.9	37.9	37.9
GE 6000	29.0	32.4	34.1	34.1	34.1	34.5	35.5	36.6	37.2	37.6	37.6	37.6	37.9	37.9	37.9	37.9
GE 5000	30.0	33.4	35.2	35.2	35.2	35.5	36.6	37.6	38.3	38.6	38.6	38.6	39.0	39.0	39.0	39.0
GE 4500	30.7	33.8	35.5	35.5	35.5	35.9	36.9	37.9	38.6	39.0	39.0	39.0	39.3	39.3	39.3	39.3
GE 4000	32.1	35.5	37.2	37.2	37.2	37.6	38.6	39.7	40.3	40.7	40.7	40.7	41.0	41.0	41.0	41.0
GE 3500	32.8	36.6	38.3	38.6	38.6	39.0	40.0	41.0	41.7	42.1	42.1	42.1	42.4	42.4	42.4	42.4
GE 3000	34.5	39.0	40.7	41.0	41.0	41.4	42.4	43.4	44.1	44.5	44.5	44.5	44.9	44.8	44.8	44.8
GE 2500	42.8	49.0	50.7	51.0	51.4	52.1	53.1	54.5	55.2	55.5	55.5	55.9	56.2	56.2	56.2	56.2
GE 2000	46.2	52.4	54.1	54.5	54.8	55.5	56.6	57.9	58.6	59.0	59.0	59.3	60.0	60.0	60.0	60.3
GE 1800	47.9	54.1	55.9	56.6	56.9	57.6	58.6	60.0	60.7	61.0	61.0	61.4	62.1	62.1	62.1	62.4
GE 1600	51.0	57.6	59.3	60.3	60.7	61.7	62.8	64.1	64.8	65.2	65.2	65.5	66.2	66.2	66.2	66.6
GE 1400	59.3	69.3	71.0	73.4	74.1	76.2	77.9	82.1	83.8	84.1	84.1	84.8	85.5	85.5	85.5	85.9
GE 1200	63.1	73.4	75.2	77.6	78.6	81.0	82.8	86.9	88.6	89.0	89.0	89.7	90.3	90.3	90.3	90.7
GE 1000	63.1	73.4	75.2	77.6	78.6	81.0	83.1	87.6	89.3	89.7	89.7	90.3	91.0	91.0	91.0	91.4
GE 900	63.4	73.8	75.5	77.9	79.2	81.4	83.4	87.9	89.7	90.0	90.0	90.7	91.4	91.4	91.4	91.7
GE 800	62.8	74.1	76.4	79.3	81.7	83.1	85.9	90.7	92.4	93.1	93.1	93.8	94.5	94.5	94.5	94.8
GE 600	64.1	74.5	77.2	79.7	81.7	84.1	86.9	91.7	93.4	94.1	94.1	94.8	95.5	95.5	95.5	95.9
GE 500	64.1	75.5	78.3	80.7	82.8	85.2	87.9	92.8	94.5	95.2	95.2	95.9	96.6	96.6	96.6	96.9
GE 400	64.1	75.5	78.3	80.7	82.8	85.2	87.9	92.8	94.5	95.5	95.5	96.2	96.9	96.9	96.9	97.2
GE 300	64.1	75.5	78.3	80.7	82.8	85.2	87.9	93.4	95.5	96.9	96.9	97.6	98.3	98.3	98.3	98.6
GE 200	64.1	75.5	78.3	80.7	82.8	85.2	87.9	93.4	95.5	96.9	96.9	97.6	98.6	99.0	99.0	99.3
GE 100	64.1	75.5	78.3	80.7	82.8	85.2	87.9	93.4	95.5	96.9	96.9	97.6	98.6	99.0	99.0	100.0
GE 0	64.1	75.5	78.3	80.7	82.8	85.2	87.9	93.4	95.5	96.9	96.9	97.6	98.6	99.0	99.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 240

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-66
MONTH: NOV HOURS(LST): 0600-0800

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1 100	GE 90	GE 80	GE 60	GE 48	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	14.6	20.3	20.7	21.4	22.1	22.4	22.8	23.8	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
GE 2000	20.3	22.1	22.4	23.1	23.8	24.1	24.5	25.5	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9
GE 1800	20.3	22.1	22.4	23.1	23.8	24.1	24.5	25.5	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9
GE 1600	20.3	22.1	22.4	23.1	23.8	24.1	24.5	25.5	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9
GE 1400	20.3	22.1	22.4	23.1	23.8	24.1	24.5	25.5	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9
GE 1200	20.3	22.1	22.4	23.1	23.8	24.1	24.5	25.5	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9
GE 1000	26.9	29.3	30.0	31.4	32.1	32.6	33.1	34.8	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
GE 900	26.9	29.3	30.0	31.4	32.1	32.6	33.1	34.8	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
GE 800	26.9	29.3	30.0	31.4	32.1	32.6	33.1	34.8	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
GE 700	26.9	29.3	30.0	31.4	32.1	32.6	33.1	34.8	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
GE 600	26.9	29.3	30.0	31.4	32.1	32.6	33.1	34.8	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
GE 500	27.9	30.3	31.0	32.4	33.1	33.6	34.1	35.9	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2
GE 400	27.9	30.3	31.0	32.4	33.1	33.6	34.1	35.9	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2
GE 300	29.7	32.4	33.1	34.8	35.5	36.2	36.6	38.3	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6
GE 200	31.0	33.8	34.5	36.2	36.9	37.6	37.9	39.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE 100	32.8	35.9	36.6	38.3	39.0	39.7	40.0	41.7	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1
GE 2500	41.7	46.6	47.2	49.3	50.7	51.7	52.4	54.1	54.8	54.8	54.8	54.8	54.8	55.2	55.2	55.2
GE 2100	43.4	48.3	49.7	51.7	53.1	54.5	55.2	56.9	57.6	57.6	57.6	57.6	57.6	57.9	57.9	57.9
GE 1900	45.9	51.0	52.8	54.8	56.2	57.6	58.3	60.0	60.7	60.7	60.7	60.7	60.7	61.0	61.0	61.0
GE 1700	48.3	54.8	56.6	58.6	60.0	61.4	62.1	63.8	64.5	64.5	64.5	64.5	64.5	64.8	64.8	64.8
GE 1500	57.2	67.9	70.7	73.4	75.2	77.2	80.0	83.1	84.8	85.5	85.5	85.5	85.5	85.9	85.9	85.9
GE 1300	59.3	70.3	73.4	76.2	77.9	80.0	81.1	86.2	87.9	88.6	88.6	88.6	88.6	89.0	89.0	89.0
GE 1100	63.7	71.7	74.8	77.6	79.3	81.4	84.5	87.6	89.3	90.0	90.0	90.0	90.0	90.3	90.3	90.3
GE 900	61.7	72.8	75.9	78.6	80.7	82.4	85.9	89.0	90.7	91.4	91.4	91.4	91.4	91.7	91.7	91.7
GE 700	60.1	73.4	76.6	79.3	81.4	83.4	86.6	90.0	91.7	92.4	92.4	92.4	92.4	93.1	93.1	93.1
GE 600	62.1	74.1	77.2	80.0	82.1	84.1	87.6	91.0	92.8	93.4	93.4	93.4	93.4	94.1	94.1	94.1
GE 500	62.4	74.5	77.9	80.7	82.4	84.8	88.3	91.7	93.8	94.8	95.5	95.9	95.9	96.2	96.2	96.2
GE 400	62.4	74.5	77.9	80.7	82.4	84.8	88.3	91.7	93.8	94.8	95.5	95.9	95.9	96.2	96.2	96.2
GE 300	62.4	74.5	77.9	80.7	82.4	84.8	88.3	91.7	93.8	94.8	95.5	95.9	95.9	96.2	96.2	96.2
GE 200	62.4	74.5	77.9	80.7	82.4	84.8	88.3	91.7	93.8	94.8	95.5	95.9	95.9	96.2	96.2	96.2
GE 100	62.4	74.5	77.9	80.7	82.4	84.8	88.3	91.7	93.8	94.8	95.5	95.9	95.9	96.2	96.2	96.2
GE 0	62.4	74.5	77.9	80.7	82.4	84.8	88.3	91.7	93.8	94.8	95.5	95.9	95.9	96.2	96.2	96.2
GE 0	62.4	74.5	77.9	80.7	82.4	84.8	88.3	91.7	93.8	94.8	95.5	95.9	95.9	96.2	96.2	96.2

TOTAL NUMBER OF OBSERVATIONS: 240

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS(LST): 0900-1100

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 90	GE 30	GE 60	GE 40	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	16.5	17.5	18.2	19.6	19.6	20.3	20.3	21.0	21.0	21.0	21.7	21.3	21.3	21.3	21.3	21.3
GE 20000	18.9	19.9	21.0	22.3	22.3	23.0	23.0	23.7	23.7	23.7	24.1	24.1	24.1	24.1	24.1	24.1
GE 18000	18.9	19.9	21.0	22.3	22.3	23.0	23.0	23.7	23.7	23.7	24.1	24.1	24.1	24.1	24.1	24.1
GE 16000	18.9	19.9	21.0	22.3	22.3	23.0	23.0	23.7	23.7	23.7	24.1	24.1	24.1	24.1	24.1	24.1
GE 14000	18.9	19.9	21.0	22.3	22.3	23.0	23.0	23.7	23.7	23.7	24.1	24.1	24.1	24.1	24.1	24.1
GE 12000	18.9	19.9	21.0	22.3	22.3	23.0	23.0	23.7	23.7	23.7	24.1	24.1	24.1	24.1	24.1	24.1
GE 10000	27.1	28.5	29.9	31.6	31.6	32.6	32.6	33.7	33.7	34.0	34.4	34.4	34.4	34.4	34.4	34.4
GE 9000	27.1	28.5	29.9	31.6	31.6	32.6	32.6	33.7	33.7	34.0	34.4	34.4	34.4	34.4	34.4	34.4
GE 8000	27.1	28.5	29.9	31.6	31.6	32.6	32.6	33.7	33.7	34.0	34.4	34.4	34.4	34.4	34.4	34.4
GE 7000	27.1	28.5	29.9	31.6	31.6	32.6	32.6	33.7	33.7	34.0	34.4	34.4	34.4	34.4	34.4	34.4
GE 6000	27.1	28.5	29.9	31.6	31.6	32.6	32.6	33.7	33.7	34.0	34.4	34.4	34.4	34.4	34.4	34.4
GE 5000	27.8	29.2	30.6	32.3	32.3	33.3	33.3	34.4	34.4	34.7	35.1	35.1	35.1	35.1	35.1	35.1
GE 4000	27.9	29.2	30.6	32.3	32.3	33.3	33.3	34.4	34.4	34.7	35.1	35.1	35.1	35.1	35.1	35.1
GE 3000	30.2	31.6	33.3	34.7	34.7	35.7	35.7	37.1	37.1	37.5	37.8	37.8	37.8	37.8	37.8	37.8
GE 2000	30.6	32.0	33.3	35.1	35.1	36.1	36.1	37.5	37.5	37.8	38.1	38.1	38.1	38.1	38.1	38.1
GE 1000	32.0	33.3	34.7	36.4	36.4	37.5	37.5	38.8	38.8	39.2	39.5	39.5	39.5	39.5	39.5	39.5
GE 2500	41.9	44.3	45.7	47.8	48.1	49.1	49.1	51.2	51.5	51.9	52.2	52.2	52.6	52.6	52.6	52.6
GE 2000	44.7	47.8	49.1	51.2	51.5	52.6	52.6	54.6	55.0	55.3	55.7	55.7	56.0	56.0	56.0	56.0
GE 1800	46.4	50.2	51.5	53.6	54.0	55.0	55.0	57.0	57.4	57.7	58.1	58.1	58.4	58.4	58.4	58.4
GE 1600	49.1	54.0	55.7	57.7	58.4	59.5	59.5	61.5	61.9	62.2	62.5	62.5	62.9	62.9	62.9	62.9
GE 1400	57.7	66.3	68.7	72.9	74.2	75.9	76.6	81.1	82.5	83.5	87.8	84.5	85.2	85.2	85.2	85.2
GE 1200	59.5	68.7	71.1	75.3	76.6	78.7	79.4	83.8	85.2	86.3	86.6	87.3	88.0	88.0	88.0	88.0
GE 1000	59.8	69.1	71.5	76.3	77.7	79.7	80.4	84.9	86.3	87.3	87.6	88.3	89.0	89.0	89.0	89.0
GE 800	60.8	70.1	72.5	77.3	78.7	80.8	81.4	85.9	87.3	88.3	88.6	89.3	90.0	90.0	90.0	90.0
GE 700	61.5	71.1	73.5	78.7	80.1	82.5	83.2	88.7	90.4	91.4	91.8	92.4	93.1	93.1	93.1	93.1
GE 600	61.5	71.1	74.0	79.4	80.8	83.5	84.2	89.7	91.4	92.4	92.8	93.8	94.5	94.5	94.5	94.5
GE 500	61.9	71.5	74.6	79.7	81.1	83.8	84.5	90.0	91.8	92.6	93.1	94.2	94.8	94.8	94.8	94.8
GE 400	62.2	72.5	75.6	80.8	82.5	85.2	85.9	91.8	93.8	94.8	95.2	96.2	96.9	96.9	96.9	96.9
GE 300	62.2	72.9	75.9	81.4	83.2	85.9	86.9	92.8	95.2	96.2	96.6	97.6	98.3	98.3	98.3	98.3
GE 200	62.2	72.9	75.9	81.4	83.2	85.9	86.9	92.8	95.2	96.2	96.6	97.6	98.3	98.3	98.3	98.3
GE 100	62.5	73.2	76.3	81.6	83.5	86.6	87.6	93.5	95.9	96.9	97.7	98.3	99.3	99.3	99.3	99.7
GE 0	62.5	73.2	76.3	81.6	83.5	86.6	87.6	93.5	95.9	96.9	97.7	98.3	99.3	99.3	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS: 291

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 271130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86

MONTH: NOV HOURS(IST): 1200-1400

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	61	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
	1	160	90	80	60	48	40	32	24	20	16	12	10	8	5	4
NO CEIL	1	10.8	14.5	14.5	16.6	19.3	19.7	20.4	20.4	21.1	21.1	21.1	21.1	21.1	21.1	21.1
GE 20000	17.3	19.4	19.4	21.5	23.9	24.6	25.6	25.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6
GE 18000	17.3	19.4	19.4	21.5	23.9	24.6	25.6	25.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6
GE 16000	17.3	19.4	19.4	21.5	23.9	24.6	25.6	25.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6
GE 14000	17.3	19.4	19.4	21.5	23.9	24.6	25.6	25.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6
GE 12000	17.3	19.4	19.4	21.5	23.9	24.6	25.6	25.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6
GE 10000	26.0	28.7	29.1	32.2	34.9	36.7	37.7	38.4	39.8	40.1	40.1	40.1	40.1	40.1	40.1	40.1
GE 9000	26.0	28.7	29.1	32.2	34.9	36.7	37.7	38.4	39.8	40.1	40.1	40.1	40.1	40.1	40.1	40.1
GE 8000	26.0	28.7	29.1	32.2	34.9	36.7	37.7	38.4	39.8	40.1	40.1	40.1	40.1	40.1	40.1	40.1
GE 7000	26.0	28.7	29.1	32.2	34.9	36.7	37.7	38.4	39.8	40.1	40.1	40.1	40.1	40.1	40.1	40.1
GE 6000	26.0	28.7	29.1	32.2	34.9	36.7	37.7	38.4	39.8	40.1	40.1	40.1	40.1	40.1	40.1	40.1
GE 5000	26.6	29.4	29.4	32.9	35.6	37.4	38.4	39.1	40.5	40.8	40.8	40.8	40.8	40.8	40.8	40.8
GE 4500	26.6	29.4	29.4	32.9	35.6	37.4	38.4	39.1	40.5	40.8	40.8	40.8	40.8	40.8	40.8	40.8
GE 4000	27.7	30.4	30.4	33.9	36.7	38.4	39.4	40.1	41.5	41.9	41.9	41.9	41.9	41.9	41.9	41.9
GE 3500	27.7	30.4	31.1	34.3	37.0	38.8	39.8	40.5	41.9	42.2	42.2	42.2	42.2	42.2	42.2	42.2
GE 3000	29.1	32.5	33.2	36.3	39.1	40.8	41.9	42.6	43.9	44.3	44.3	44.3	44.3	44.3	44.3	44.3
GE 2500	38.4	43.6	45.0	48.8	51.6	54.0	55.7	57.1	58.9	59.2	59.2	59.5	59.5	59.5	59.5	59.5
GE 2000	42.2	47.4	48.8	52.9	56.1	58.5	60.2	61.6	63.3	63.7	63.7	64.0	64.0	64.0	64.0	64.0
GE 1800	42.9	48.4	49.8	54.0	57.1	59.5	61.2	62.6	64.4	64.7	64.7	65.1	65.1	65.1	65.1	65.1
GE 1600	45.0	51.2	52.0	56.7	59.9	62.3	64.0	65.4	67.1	67.6	67.6	68.2	68.2	68.2	68.2	68.2
GE 1400	51.9	61.9	62.3	66.8	71.3	76.1	78.5	82.0	84.9	86.5	86.5	87.2	87.5	87.5	87.5	87.5
GE 1200	51.9	61.9	62.3	66.8	71.3	76.1	78.5	82.0	84.9	86.5	86.5	87.2	87.5	87.5	87.5	87.5
GE 1000	51.9	61.9	62.3	66.8	71.3	76.1	78.5	82.0	84.9	86.5	86.5	87.2	87.5	87.5	87.5	87.5
GE 900	52.6	62.6	64.0	68.5	73.0	78.5	81.0	84.4	87.2	89.3	89.3	90.0	90.3	90.3	90.3	90.7
GE 800	52.6	62.6	64.0	68.5	73.0	78.5	81.0	84.4	87.2	89.3	89.3	90.0	90.3	90.3	90.7	91.0
GE 700	52.9	64.0	65.7	70.9	75.6	81.7	84.1	88.2	91.0	93.1	93.1	93.8	94.8	94.8	94.8	95.2
GE 600	53.3	64.4	66.1	71.3	76.5	82.4	84.8	89.3	92.0	94.1	94.1	94.8	95.9	95.8	95.8	96.2
GE 500	54.0	65.1	66.8	72.3	77.5	84.4	86.9	91.7	94.5	96.5	96.5	97.2	98.6	98.6	98.6	99.0
GE 400	54.0	65.1	66.8	72.3	77.5	84.4	86.9	91.7	94.5	96.5	96.5	97.2	98.6	98.6	98.6	99.0
GE 300	54.0	65.1	66.8	72.3	77.5	84.4	86.9	91.7	94.5	96.5	96.5	97.2	98.6	98.6	98.6	99.0
GE 200	54.0	65.1	66.8	72.3	77.5	84.4	86.9	91.7	94.5	96.5	96.5	97.2	98.6	98.6	98.6	99.0
GE 100	54.0	65.1	66.8	72.3	77.5	84.4	86.9	91.7	94.5	96.5	96.5	97.2	98.6	99.0	99.0	100.0
GE 0	54.0	65.1	66.8	72.3	77.5	84.4	86.9	91.7	94.5	96.5	96.5	97.2	98.6	99.0	99.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 289

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS(IST): 1500-1700

CEILING IN FEET	GE 100	GE 90	GE 80	GE 60	GE 40	GE 30	GE 20	GE 10	GE 5	GE 4	GE 3	GE 2	GE 1	GE 0
NO CEIL	14.6	18.4	19.1	20.1	20.8	21.9	22.2	22.9	23.6	24.0	24.3	24.3	24.3	24.3
GE 20000	17.7	22.6	23.3	24.3	25.0	26.4	27.1	27.8	28.5	28.8	29.2	29.2	29.2	29.2
GE 18000	17.7	22.6	23.3	24.3	25.0	26.4	27.1	27.8	28.5	28.8	29.2	29.2	29.2	29.2
GE 16000	17.7	22.6	23.3	24.3	25.0	26.4	27.1	27.8	28.5	28.8	29.2	29.2	29.2	29.2
GE 14000	17.7	22.6	23.3	24.3	25.0	26.4	27.1	27.8	28.5	28.8	29.2	29.2	29.2	29.2
GE 12000	17.7	22.6	23.3	24.3	25.0	26.4	27.1	27.8	28.5	28.8	29.2	29.2	29.2	29.2
GE 10000	27.8	34.0	35.1	37.5	38.5	40.3	41.0	42.0	43.4	43.8	44.1	44.1	44.1	44.1
GE 9000	27.8	34.0	35.1	37.5	38.5	40.3	41.0	42.0	43.4	43.8	44.1	44.1	44.1	44.1
GE 8000	27.8	34.0	35.1	37.5	38.5	40.3	41.0	42.0	43.4	43.8	44.1	44.1	44.1	44.1
GE 7000	27.8	34.0	35.1	37.5	38.5	40.3	41.0	42.0	43.4	43.8	44.1	44.1	44.1	44.1
GE 6000	27.8	34.0	35.1	37.5	38.5	40.3	41.0	42.0	43.4	43.8	44.1	44.1	44.1	44.1
GE 5000	27.8	34.0	35.1	37.5	38.5	40.3	41.0	42.0	43.4	43.8	44.1	44.1	44.1	44.1
GE 4500	27.8	34.4	35.4	37.9	38.9	40.6	41.3	42.4	43.8	44.1	44.1	44.4	44.4	44.4
GE 4000	29.9	36.5	37.5	39.9	41.0	42.7	43.4	44.4	45.8	46.2	46.5	46.5	46.5	46.5
GE 3500	30.2	36.8	37.8	40.3	41.3	43.1	43.8	44.8	46.2	46.5	46.5	46.9	46.9	46.9
GE 3000	32.6	39.2	40.3	42.7	43.8	45.5	46.2	47.2	48.6	49.0	49.0	49.3	49.3	49.3
GE 2500	39.9	50.0	51.0	54.5	55.9	58.3	59.0	60.4	61.8	62.2	62.8	62.8	62.8	62.8
GE 2000	41.3	51.4	52.4	55.9	57.6	60.1	60.8	62.2	63.5	63.9	64.2	64.6	64.6	64.6
GE 1800	42.7	52.8	53.8	57.3	59.0	61.5	62.2	63.5	64.9	65.3	65.6	66.0	66.0	66.0
GE 1600	43.8	55.2	56.3	59.7	61.5	64.2	64.9	66.3	67.7	68.1	68.4	68.8	68.8	68.8
GE 1400	51.4	65.3	66.7	71.5	74.7	76.8	80.6	82.6	86.1	87.2	87.9	88.9	89.6	89.9
GE 1200	52.4	66.3	67.7	72.6	75.7	79.9	81.6	84.4	87.8	88.9	89.6	90.6	91.0	91.3
GE 1000	52.8	66.7	69.1	72.9	76.0	80.6	82.3	85.4	88.9	89.9	90.6	91.7	92.0	92.4
GE 900	53.1	67.0	69.4	73.3	76.4	80.9	82.6	85.8	89.2	90.3	91.0	92.0	92.4	92.7
GE 800	53.5	67.7	69.1	74.3	77.4	81.9	83.7	87.2	91.3	92.4	93.1	94.1	94.8	95.1
GE 700	53.5	68.4	69.8	75.0	78.1	82.6	84.4	87.8	92.4	93.4	94.1	95.5	96.2	96.5
GE 600	53.5	69.4	69.8	75.0	78.1	82.6	84.4	87.8	92.4	93.4	94.1	95.5	96.2	96.5
GE 500	53.5	69.1	70.5	76.4	79.5	84.0	85.8	89.2	93.8	95.1	95.8	97.2	98.3	98.6
GE 400	53.5	69.1	70.5	76.4	79.5	84.0	85.8	89.2	93.8	95.1	95.8	97.2	98.3	98.6
GE 300	53.5	69.1	70.5	76.4	79.5	84.0	85.8	89.2	93.8	95.1	95.8	97.2	98.3	98.6
GE 200	53.5	69.1	70.5	76.4	79.5	84.0	85.8	89.2	93.8	95.1	95.8	97.2	98.3	98.6
GE 100	53.5	69.1	70.5	76.4	79.5	84.0	85.8	89.2	93.8	95.1	95.8	97.2	98.3	98.6
GE 0	53.5	69.1	70.5	76.4	79.5	84.0	85.8	89.2	93.8	95.1	95.8	97.2	98.3	98.6

TOTAL NUMBER OF OBSERVATIONS: 268

GLOBAL CLIMATOLOGY BRANCH
USAF/CLTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURSLIST: 1800-2300

CEILING		VISIBILITY IN HUNDREDS OF METERS															
IN	FEET	GE 1	GE 2	GE 3	GE 4	GE 5	GE 6	GE 7	GE 8	GE 9	GE 10	GE 12	GE 14	GE 16	GE 18	GE 20	GE 24
NO CEIL	1	19.2	20.2	20.9	22.3	23.3	23.6	23.6	24.7	24.7	25.0	25.3	25.3	25.3	25.3	25.3	25.3
GE 2000	19.2	21.2	22.3	23.6	24.7	25.0	25.0	26.0	26.0	26.0	26.4	26.7	26.7	26.7	26.7	26.7	26.7
GE 1800	19.2	21.2	22.3	23.6	24.7	25.0	25.0	26.0	26.0	26.0	26.4	26.7	26.7	26.7	26.7	26.7	26.7
GE 1600	19.2	21.2	22.3	23.6	24.7	25.0	25.0	26.0	26.0	26.0	26.4	26.7	26.7	26.7	26.7	26.7	26.7
GE 1400	19.2	21.2	22.3	23.6	24.7	25.0	25.0	26.0	26.0	26.0	26.4	26.7	26.7	26.7	26.7	26.7	26.7
GE 1200	19.2	21.2	22.3	23.6	24.7	25.0	25.0	26.0	26.0	26.0	26.4	26.7	26.7	26.7	26.7	26.7	26.7
GE 1000	28.1	30.5	31.8	33.9	34.9	35.6	35.6	37.7	37.7	37.7	38.0	38.4	38.4	38.4	38.4	38.4	38.4
GE 900	28.1	30.5	31.8	33.9	34.9	35.6	35.6	37.7	37.7	37.7	38.0	38.4	38.4	38.4	38.4	38.4	38.4
GE 800	28.1	30.5	31.8	33.9	34.9	35.6	35.6	37.7	37.7	37.7	38.0	38.4	38.4	38.4	38.4	38.4	38.4
GE 700	28.1	30.5	31.8	33.9	34.9	35.6	35.6	37.7	37.7	37.7	38.0	38.4	38.4	38.4	38.4	38.4	38.4
GE 600	28.1	30.5	31.8	33.9	34.9	35.6	35.6	37.7	37.7	37.7	38.0	38.4	38.4	38.4	38.4	38.4	38.4
GE 500	28.4	30.8	32.2	34.2	35.3	36.0	36.0	38.0	38.0	38.0	38.4	38.7	38.7	38.7	38.7	38.7	38.7
GE 400	29.1	31.5	32.9	34.9	36.0	36.6	36.6	38.7	38.7	38.7	39.0	39.4	39.4	39.4	39.4	39.4	39.4
GE 300	30.1	32.5	34.2	36.3	37.3	38.0	38.0	40.1	40.1	40.1	40.4	40.8	40.8	40.8	40.8	40.8	40.8
GE 200	31.6	33.9	35.6	37.7	39.7	39.4	39.4	41.4	41.4	41.4	41.6	42.1	42.1	42.1	42.1	42.1	42.1
GE 100	33.9	36.3	38.0	40.1	41.1	41.8	41.8	43.8	43.8	43.8	44.2	44.5	44.5	44.5	44.5	44.5	44.5
GE 2500	46.9	52.7	54.5	56.8	57.9	58.6	58.6	61.3	61.3	61.3	61.6	62.0	62.0	62.0	62.0	62.0	62.0
GE 2000	50.0	56.2	57.9	60.3	61.3	62.0	62.0	64.7	64.7	64.7	65.1	65.4	65.4	65.4	65.4	65.4	65.4
GE 1800	52.1	58.6	60.3	62.7	63.7	64.4	64.4	67.1	67.1	67.1	67.5	67.8	67.8	67.8	67.8	67.8	67.8
GE 1600	55.6	62.0	63.7	66.1	67.5	68.2	68.2	71.2	71.2	71.2	71.6	71.9	71.9	71.9	71.9	71.9	71.9
GE 1400	62.7	70.5	72.9	77.1	79.8	80.8	81.8	86.6	86.6	86.6	87.7	88.0	88.4	88.4	88.4	88.4	88.4
GE 1200	62.7	71.9	74.3	79.1	81.8	83.2	84.2	89.0	89.0	89.0	90.1	90.4	90.8	90.8	90.8	90.8	90.8
GE 1000	62.7	72.6	75.7	79.8	82.5	83.9	84.9	89.7	89.7	89.7	90.8	91.1	91.4	91.4	91.4	91.4	91.4
GE 900	63.0	73.9	76.7	80.5	83.2	84.6	85.6	90.6	90.6	90.6	91.8	92.1	92.5	92.5	92.5	92.5	92.5
GE 800	64.0	75.0	77.7	82.5	85.3	86.6	88.0	93.2	93.2	93.2	94.2	94.5	94.9	94.9	94.9	94.9	94.9
GE 700	64.0	75.0	78.4	83.2	86.0	87.3	88.7	94.2	94.2	94.2	95.2	95.5	95.9	95.9	95.9	95.9	95.9
GE 600	64.4	75.7	79.1	83.9	86.6	88.0	89.4	94.9	94.9	94.9	95.9	96.2	96.6	96.6	96.6	96.6	96.6
GE 500	64.4	76.7	80.1	84.9	87.7	89.0	90.4	95.9	95.9	95.9	96.9	97.3	97.6	97.6	97.6	97.6	97.6
GE 400	64.4	76.7	80.1	84.9	87.7	89.4	90.8	96.2	96.2	96.2	97.3	97.6	97.6	97.6	97.6	97.6	97.6
GE 300	64.4	76.7	80.1	84.9	87.7	89.4	90.8	96.2	96.2	96.2	97.3	97.6	97.6	97.6	97.6	97.6	97.6
GE 200	64.4	76.7	80.1	84.9	87.7	89.4	90.8	96.2	96.2	96.2	97.3	97.6	97.6	97.6	97.6	97.6	97.6
GE 100	64.4	76.7	80.1	84.9	87.7	89.4	90.8	96.2	96.2	96.2	97.3	97.6	97.6	97.6	97.6	97.6	97.6

TOTAL NUMBER OF OBSERVATIONS: 292

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS(LST): 2100-2300

CEILING		VISIBILITY IN HUNDREDS OF METERS																
IN	FEET	1	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256
NO CEIL	1	16.1	19.5	21.2	22.0	24.3	25.0	25.0	25.3	25.7	25.7	25.7	25.7	26.0	26.0	26.0	26.0	26.0
GE 2000	17.8	21.2	22.9	24.3	26.0	26.7	26.7	27.1	27.4	27.4	27.4	27.4	27.7	27.7	27.7	27.7	27.7	27.7
GE 1800	17.8	21.2	22.9	24.3	26.0	26.7	26.7	27.1	27.4	27.4	27.4	27.4	27.7	27.7	27.7	27.7	27.7	27.7
GE 1600	17.8	21.2	22.9	24.3	26.0	26.7	26.7	27.1	27.4	27.4	27.4	27.4	27.7	27.7	27.7	27.7	27.7	27.7
GE 1400	17.8	21.2	22.9	24.3	26.0	26.7	26.7	27.1	27.4	27.4	27.4	27.4	27.7	27.7	27.7	27.7	27.7	27.7
GE 1200	17.8	21.2	22.9	24.3	26.0	26.7	26.7	27.1	27.4	27.4	27.4	27.4	27.7	27.7	27.7	27.7	27.7	27.7
GE 1000	26.7	32.5	34.2	35.6	37.3	38.0	38.0	38.4	38.7	38.7	38.7	38.7	39.0	39.0	39.0	39.0	39.0	39.0
GE 900	26.7	32.5	34.2	35.6	37.3	38.0	38.0	38.4	38.7	38.7	38.7	38.7	39.0	39.0	39.0	39.0	39.0	39.0
GE 800	26.7	32.5	34.2	35.6	37.3	38.0	38.0	38.4	38.7	38.7	38.7	38.7	39.0	39.0	39.0	39.0	39.0	39.0
GE 700	26.7	32.5	34.2	35.6	37.3	38.0	38.0	38.4	38.7	38.7	38.7	38.7	39.0	39.0	39.0	39.0	39.0	39.0
GE 600	26.7	32.5	34.2	35.6	37.3	38.0	38.0	38.4	38.7	38.7	38.7	38.7	39.0	39.0	39.0	39.0	39.0	39.0
GE 500	27.4	33.2	34.9	36.3	37.0	38.7	38.7	39.0	39.4	39.4	39.4	39.4	39.7	39.7	39.7	39.7	39.7	39.7
GE 450	28.1	33.9	35.6	37.0	37.7	39.4	39.4	40.1	40.4	40.4	40.4	40.4	40.8	40.8	40.8	40.8	40.8	40.8
GE 400	29.8	35.6	37.3	38.7	40.4	41.4	41.4	42.1	42.5	42.5	42.5	42.5	42.8	42.8	42.8	42.8	42.8	42.8
GE 350	32.2	38.4	40.1	41.4	43.2	44.2	44.2	44.9	45.2	45.2	45.2	45.2	45.5	45.5	45.5	45.5	45.5	45.5
GE 300	34.6	41.1	42.8	44.2	45.9	46.9	46.9	47.6	47.9	47.9	47.9	47.9	48.3	48.3	48.3	48.3	48.3	48.3
GE 250	45.7	53.4	55.5	57.2	59.2	61.0	61.3	62.0	62.3	62.3	62.3	62.3	62.7	62.7	62.7	62.7	62.7	62.7
GE 200	48.3	56.6	58.9	60.6	62.7	64.4	64.7	65.4	65.8	65.8	65.8	65.8	66.1	66.1	66.1	66.1	66.1	66.1
GE 180	48.6	57.5	59.6	61.3	63.4	65.1	65.4	66.1	66.4	66.4	66.4	66.4	66.8	66.8	66.8	66.8	66.8	66.8
GE 150	51.4	61.3	63.4	65.1	67.1	68.8	69.2	69.9	70.2	70.2	70.2	70.2	70.5	70.5	70.5	70.5	70.5	70.5
GE 100	57.2	71.9	74.3	77.7	80.1	82.9	83.9	86.6	87.7	88.0	88.0	88.0	88.7	88.7	88.7	88.7	88.7	88.7
GE 80	57.9	72.9	75.3	78.0	81.2	83.9	84.9	88.4	89.4	89.7	89.7	89.7	90.4	90.4	90.4	90.4	90.4	90.4
GE 70	57.9	72.9	75.3	79.1	81.5	84.2	85.3	88.7	89.7	90.1	90.1	90.1	90.8	90.8	90.8	90.8	90.8	90.8
GE 60	58.2	73.3	75.7	79.5	81.8	84.6	85.6	89.0	90.1	90.4	90.4	90.4	91.1	91.1	91.1	91.1	91.1	91.1
GE 50	54.6	74.0	76.4	80.1	82.5	85.3	86.3	90.1	91.1	91.4	91.4	91.4	92.5	92.5	92.5	92.5	92.5	92.5
GE 40	58.6	74.0	76.4	80.8	83.6	86.3	87.3	91.1	92.1	92.5	92.5	92.5	93.8	93.8	93.8	93.8	93.8	93.8
GE 30	58.6	74.0	76.4	80.8	83.6	86.3	87.3	91.4	92.5	92.8	92.8	92.8	93.8	94.2	94.2	94.2	94.2	94.2
GE 20	58.6	75.3	77.7	82.5	85.3	88.0	89.0	93.5	94.5	94.9	94.9	94.9	95.9	96.2	96.2	96.2	96.2	96.2
GE 10	58.6	75.3	77.7	82.5	85.3	88.0	89.0	94.2	95.2	95.9	96.2	96.2	97.6	97.9	98.3	98.3	98.3	98.3
GE 0	58.6	75.3	77.7	82.5	85.3	88.0	89.0	94.5	96.2	96.6	96.6	96.6	97.9	98.3	98.6	99.3	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS: 742

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VISUAL VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV HOURS(IST): ALL

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 1	GE 2	GE 3	GE 4	GE 5	GE 6	GE 7	GE 8	GE 9	GE 10	GE 12	GE 14	GE 16	GE 18	GE 20	GE 25
NO CEIL	17.2	19.6	22.5	21.4	22.3	22.8	23.1	23.7	24.0	24.1	24.2	24.3	24.3	24.3	24.3	24.3
GE 20000	19.1	21.7	22.5	23.6	24.5	25.1	25.4	26.0	26.3	26.5	26.5	26.6	26.7	26.7	26.7	26.7
GE 18000	19.1	21.7	22.5	23.6	24.5	25.1	25.4	26.0	26.3	26.5	26.5	26.6	26.7	26.7	26.7	26.7
GE 16000	19.1	21.7	22.5	23.6	24.5	25.1	25.4	26.0	26.3	26.5	26.5	26.6	26.7	26.7	26.7	26.7
GE 14000	19.1	21.7	22.5	23.6	24.5	25.1	25.4	26.0	26.3	26.5	26.5	26.6	26.7	26.7	26.7	26.7
GE 12000	19.1	21.7	22.5	23.6	24.5	25.1	25.4	26.0	26.3	26.5	26.5	26.6	26.7	26.7	26.7	26.7
GE 10000	27.6	31.2	32.4	34.0	35.0	36.0	36.4	37.6	38.1	38.3	38.4	38.5	38.5	38.5	38.5	38.5
GE 9000	27.6	31.2	32.4	34.0	35.0	36.0	36.4	37.6	38.1	38.3	38.4	38.5	38.5	38.5	38.5	38.5
GE 8000	27.6	31.2	32.4	34.0	35.0	36.0	36.4	37.6	38.1	38.3	38.4	38.5	38.5	38.5	38.5	38.5
GE 7000	27.6	31.2	32.4	34.0	35.0	36.0	36.4	37.6	38.1	38.3	38.4	38.5	38.5	38.5	38.5	38.5
GE 6000	27.6	31.2	32.4	34.0	35.0	36.0	36.4	37.6	38.1	38.3	38.4	38.5	38.5	38.5	38.5	38.5
GE 5000	28.2	31.6	33.0	34.7	35.7	36.7	37.1	38.3	38.8	39.0	39.1	39.2	39.2	39.2	39.2	39.2
GE 4500	28.5	32.2	33.3	35.0	36.1	37.1	37.4	38.6	39.2	39.4	39.5	39.6	39.6	39.6	39.6	39.6
GE 4000	30.3	34.1	35.7	37.1	38.1	39.2	39.6	40.8	41.3	41.5	41.6	41.7	41.7	41.7	41.7	41.7
GE 3500	31.3	35.2	36.4	38.2	39.3	40.3	40.7	42.0	42.5	42.7	42.8	42.9	42.9	42.9	42.9	42.9
GE 3000	33.3	37.4	38.6	40.4	41.4	42.5	42.9	44.2	44.7	44.9	45.0	45.1	45.1	45.1	45.1	45.1
GE 2500	42.7	44.9	50.4	52.6	53.9	55.3	56.0	57.6	58.2	58.4	58.6	58.7	58.7	58.9	58.9	58.9
GE 2000	45.7	50.1	53.6	55.9	57.3	58.8	59.4	61.0	61.7	61.9	62.0	62.2	62.4	62.4	62.4	62.5
GE 1800	47.1	53.8	55.4	57.6	59.1	60.5	61.2	62.8	63.5	63.7	63.8	64.0	64.2	64.2	64.2	64.3
GE 1600	49.5	57.0	59.6	61.0	62.5	64.0	64.7	66.3	67.0	67.3	67.4	67.6	67.7	67.8	67.8	67.9
GE 1400	57.2	67.8	72.1	73.7	76.2	76.8	80.3	83.8	85.4	86.2	86.3	86.9	87.2	87.3	87.3	87.5
GE 1200	58.5	69.0	72.0	75.7	78.2	81.0	82.6	86.3	87.9	88.7	88.9	89.4	89.7	89.9	89.9	90.0
GE 1000	58.9	70.1	72.4	76.3	79.3	81.6	83.3	87.1	88.7	89.5	89.7	90.2	90.5	90.7	90.7	90.8
GE 800	59.3	71.5	72.9	76.9	79.4	82.2	83.9	87.8	89.4	90.2	90.3	90.9	91.2	91.3	91.3	91.5
GE 700	59.8	71.6	74.2	78.2	80.9	83.6	85.7	89.9	91.6	92.5	92.8	93.3	93.8	94.0	94.0	94.1
GE 600	59.8	71.9	74.6	78.8	81.6	84.6	86.5	90.9	92.7	93.6	93.9	94.5	95.0	95.1	95.1	95.3
GE 500	60.1	72.3	75.1	79.3	82.1	85.1	87.0	91.5	93.3	94.3	94.6	95.3	95.8	95.9	95.9	96.1
GE 400	60.3	72.3	75.7	80.0	83.0	86.2	88.1	92.7	94.7	95.7	96.1	96.8	97.4	97.5	97.5	97.7
GE 300	60.3	72.9	75.7	80.1	83.1	86.3	88.3	93.1	95.2	96.3	96.7	97.4	98.0	98.1	98.1	98.3
GE 200	60.3	72.9	75.7	80.1	83.1	86.4	88.4	93.2	95.4	96.5	96.9	97.5	98.4	98.8	98.8	99.0
GE 100	60.7	72.9	75.7	80.1	83.1	86.4	88.4	93.3	95.5	96.6	97.0	97.7	98.6	99.1	99.2	99.8
GE 0	60.4	72.9	75.7	80.2	83.2	86.5	88.4	93.4	95.5	96.6	97.1	97.7	98.6	99.2	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS: 2321

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURLY OBSERVATIONS

STATION NUMBER: 201137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS(IST): 0000-0200

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 200	GE 400	GE 600	GE 800	GE 1000	GE 1200	GE 1400	GE 1600	GE 1800	GE 2000	GE 2400	GE 2800	GE 3200	GE 3600	GE 4000
NO CEIL	19.8	23.5	24.7	26.5	30.5	31.5	32.6	34.6	34.9	35.2	37.2	37.6	37.6	37.6	37.6	37.9
GE 20000	21.5	25.2	26.2	28.9	32.9	33.9	34.9	36.9	37.2	37.6	37.6	37.6	37.6	37.6	37.9	37.9
GE 16000	21.5	25.2	26.2	28.9	32.9	33.9	34.9	36.9	37.2	37.6	37.6	37.6	37.6	37.6	37.9	37.9
GE 14000	21.5	25.2	26.2	28.9	32.9	33.9	34.9	36.9	37.2	37.6	37.6	37.6	37.6	37.6	37.9	37.9
GE 12000	21.5	25.2	26.2	28.9	32.9	33.9	34.9	36.9	37.2	37.6	37.6	37.6	37.6	37.6	37.9	37.9
GE 10000	29.9	34.6	36.6	39.3	43.3	44.6	45.6	47.7	48.0	49.0	49.0	49.0	49.0	49.0	49.3	49.3
GE 9000	29.9	34.6	36.6	39.3	43.3	44.6	45.6	47.7	48.0	49.0	49.0	49.0	49.0	49.0	49.3	49.3
GE 8000	29.9	34.6	36.6	39.3	43.3	44.6	45.6	47.7	48.0	49.0	49.0	49.0	49.0	49.0	49.3	49.3
GE 7000	29.9	34.6	36.6	39.3	43.3	44.6	45.6	47.7	48.0	49.0	49.0	49.0	49.0	49.0	49.3	49.3
GE 6000	29.9	34.6	36.6	39.3	43.3	44.6	45.6	47.7	48.0	49.0	49.0	49.0	49.0	49.0	49.3	49.3
GE 5000	29.9	34.6	36.6	39.3	43.3	44.6	45.6	47.7	48.0	49.0	49.0	49.0	49.0	49.0	49.3	49.3
GE 4000	30.9	35.6	37.6	40.3	44.3	45.6	46.6	48.7	49.0	50.0	50.0	50.0	50.0	50.0	50.3	50.3
GE 3000	31.9	36.6	38.6	41.3	45.3	46.6	47.7	49.7	50.0	51.0	51.0	51.0	51.0	51.0	51.3	51.3
GE 2000	32.6	37.2	39.2	41.9	46.0	47.3	48.3	50.3	50.7	51.7	51.7	51.7	51.7	51.7	52.0	52.0
GE 1800	34.9	44.0	51.0	54.0	58.1	59.7	61.4	64.1	64.8	65.8	67.8	68.8	68.8	68.8	69.1	69.1
GE 1600	43.7	51.0	54.0	57.0	61.1	62.5	64.4	67.1	67.8	68.8	69.8	70.8	70.8	70.8	71.1	71.1
GE 1400	44.3	52.7	55.7	59.1	63.1	64.8	66.4	69.1	69.8	70.8	71.8	72.8	72.8	72.8	73.1	73.1
GE 1200	45.6	54.2	57.2	60.4	64.4	66.1	67.8	70.5	71.1	72.1	73.1	74.1	74.1	74.1	74.4	74.4
GE 1000	46.3	55.1	58.1	61.1	65.1	66.5	68.2	70.9	71.6	72.6	73.6	74.6	74.6	74.6	74.9	74.9
GE 900	47.3	56.1	59.1	62.1	66.1	67.2	68.9	71.6	72.3	73.3	74.3	75.3	75.3	75.3	75.6	75.6
GE 800	50.0	58.6	61.6	64.6	68.6	69.9	71.6	74.3	75.0	76.0	77.0	78.0	78.0	78.0	78.3	78.3
GE 700	51.7	59.7	62.7	65.7	69.7	70.9	72.6	75.3	76.0	77.0	78.0	79.0	79.0	79.0	79.3	79.3
GE 600	51.7	59.7	62.7	65.7	69.7	70.9	72.6	75.3	76.0	77.0	78.0	79.0	79.0	79.0	79.3	79.3
GE 500	51.7	59.7	62.7	65.7	69.7	70.9	72.6	75.3	76.0	77.0	78.0	79.0	79.0	79.0	79.3	79.3
GE 400	51.7	59.7	62.7	65.7	69.7	70.9	72.6	75.3	76.0	77.0	78.0	79.0	79.0	79.0	79.3	79.3
GE 300	51.7	59.7	62.7	65.7	69.7	70.9	72.6	75.3	76.0	77.0	78.0	79.0	79.0	79.0	79.3	79.3
GE 200	51.7	59.7	62.7	65.7	69.7	70.9	72.6	75.3	76.0	77.0	78.0	79.0	79.0	79.0	79.3	79.3
GE 100	51.7	59.7	62.7	65.7	69.7	70.9	72.6	75.3	76.0	77.0	78.0	79.0	79.0	79.0	79.3	79.3

TOTAL NUMBER OF OBSERVATIONS: 298

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURTY OBSERVATIONS

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS(LST): 0300-0500

CEILING IN FEET	VISIBILITY IN HUNDREDS OF FEET															
	GE 160	GE 200	GE 400	GE 600	GE 800	GE 400	GE 320	GE 240	GE 200	GE 160	GE 120	GE 100	GE 80	GE 60	GE 40	GE 20
NO CLIL	14.2	16.2	19.6	22.6	26.1	26.4	27.4	29.0	30.7	30.7	31.0	31.4	31.4	31.4	31.4	31.4
GE 10700	15.2	19.1	20.3	23.6	27.4	27.7	29.7	30.4	32.0	32.0	32.3	32.7	32.7	32.7	32.7	32.7
GE 10800	15.2	19.1	20.3	23.6	27.4	27.7	29.7	30.4	32.0	32.0	32.3	32.7	32.7	32.7	32.7	32.7
GE 16000	15.2	19.1	20.3	23.6	27.4	27.7	29.7	30.4	32.0	32.0	32.3	32.7	32.7	32.7	32.7	32.7
GE 14700	15.2	19.1	20.3	23.6	27.4	27.7	29.7	30.4	32.0	32.0	32.3	32.7	32.7	32.7	32.7	32.7
GE 12700	15.2	19.1	20.3	23.6	27.4	27.7	29.7	30.4	32.0	32.0	32.3	32.7	32.7	32.7	32.7	32.7
GE 10700	24.4	29.4	31.0	34.0	38.3	38.6	39.9	42.9	45.2	45.2	45.5	45.9	45.9	45.9	45.9	45.9
GE 9700	24.4	29.4	31.0	34.0	38.3	38.6	39.9	42.9	45.2	45.2	45.5	45.9	45.9	45.9	45.9	45.9
GE 8700	24.4	29.4	31.0	34.0	38.3	38.6	39.9	42.9	45.2	45.2	45.5	45.9	45.9	45.9	45.9	45.9
GE 7700	24.4	29.4	31.0	34.0	38.3	38.6	39.9	42.9	45.2	45.2	45.5	45.9	45.9	45.9	45.9	45.9
GE 6700	24.4	29.4	31.0	34.0	38.3	38.6	39.9	42.9	45.2	45.2	45.5	45.9	45.9	45.9	45.9	45.9
GE 5000	24.4	29.7	31.4	34.3	38.6	38.9	40.3	43.6	45.9	45.9	46.2	46.5	46.5	46.5	46.5	46.5
GE 4500	26.1	31.0	32.7	35.6	39.9	40.3	41.6	44.9	47.2	47.2	47.5	47.9	47.9	47.9	47.9	47.9
GE 4000	27.4	32.7	34.3	37.3	41.6	41.9	43.2	46.5	48.8	48.8	49.2	49.5	49.5	49.5	49.5	49.5
GE 3500	27.7	33.0	34.7	37.6	41.9	42.2	43.6	46.9	49.2	49.2	49.5	49.9	49.9	49.9	49.9	49.9
GE 3000	28.1	33.3	35.0	38.0	42.6	42.9	44.2	47.5	49.8	49.8	50.2	50.5	50.5	50.5	50.5	50.5
GE 2500	30.3	35.2	36.9	39.8	43.8	44.1	45.4	48.7	51.0	51.0	51.3	51.7	51.7	51.7	51.7	51.7
GE 2000	40.6	47.5	49.5	53.1	58.4	60.1	62.4	66.3	69.7	69.6	70.0	70.3	70.3	70.3	70.3	70.3
GE 1500	41.9	49.5	51.5	55.1	60.7	62.4	64.7	68.6	71.9	71.9	72.2	72.6	72.6	72.6	72.6	72.6
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6	72.6	73.3	73.6	73.9	73.9	73.9	73.9	73.9
GE 1000	42.6	50.5	52.5	56.1	61.7	63.4	65.7	69.6								

TOTAL NUMBER OF OBSERVATIONS: 7.3

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS(LST): 0600-0800

CEILING	VISIBILITY IN HUNDREDS OF METERS															
	IN FEET	GE 160	GE 90	GE 80	GE 60	GE 48	GE 40	GE 32	GE 24	GE 20	GE 16	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	16.6	21.6	22.7	24.4	26.4	28.5	29.5	31.2	31.2	31.9	31.9	31.9	31.9	31.9	31.9	31.9
GE 2000	18.0	22.7	24.4	26.1	28.1	30.2	31.2	32.9	32.9	33.6	33.6	33.6	33.6	33.6	33.6	33.6
GE 1800	18.1	22.7	24.4	26.1	28.1	30.2	31.2	32.9	32.9	33.6	33.6	33.6	33.6	33.6	33.6	33.6
GE 1600	18.6	22.7	24.4	26.1	28.1	30.2	31.2	32.9	32.9	33.6	33.6	33.6	33.6	33.6	33.6	33.6
GE 1400	19.0	22.7	24.4	26.1	28.1	30.2	31.2	32.9	32.9	33.6	33.6	33.6	33.6	33.6	33.6	33.6
GE 1200	19.6	22.7	24.4	26.1	28.1	30.2	31.2	32.9	32.9	33.6	33.6	33.6	33.6	33.6	33.6	33.6
GE 1000	24.1	33.5	32.5	34.2	36.3	38.3	40.7	42.4	42.4	43.4	43.4	43.4	43.4	43.4	43.4	43.4
GE 900	24.1	33.5	32.5	34.2	36.3	38.3	40.7	42.4	42.4	43.4	43.4	43.4	43.4	43.4	43.4	43.4
GE 800	24.1	33.5	32.5	34.2	36.3	38.3	40.7	42.4	42.4	43.4	43.4	43.4	43.4	43.4	43.4	43.4
GE 700	24.1	33.5	32.5	34.2	36.3	38.3	40.7	42.4	42.4	43.4	43.4	43.4	43.4	43.4	43.4	43.4
GE 600	24.1	33.5	32.5	34.2	36.3	38.3	40.7	42.4	42.4	43.4	43.4	43.4	43.4	43.4	43.4	43.4
GE 500	24.7	31.2	33.2	34.9	36.9	39.0	41.4	43.1	43.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
GE 450	25.1	31.5	33.6	35.3	37.3	39.3	41.7	43.4	43.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4
GE 400	26.8	33.6	35.6	37.3	39.3	41.4	43.7	45.4	45.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4
GE 350	27.6	34.6	36.6	38.6	42.7	44.7	46.1	46.8	46.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
GE 300	28.1	34.9	36.9	39.0	41.0	43.1	45.4	47.1	47.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1
GE 250	38.6	44.8	51.5	54.2	57.3	59.7	62.4	64.7	64.7	66.1	66.4	66.4	66.4	66.4	66.4	66.4
GE 200	39.3	50.2	52.9	55.6	58.6	61.6	63.7	66.4	66.4	67.8	68.1	68.1	68.1	68.1	68.1	68.1
GE 180	41.7	52.5	55.2	58.0	61.0	63.4	66.1	68.9	68.9	70.2	70.5	70.5	70.5	70.5	70.5	70.5
GE 160	44.1	55.9	58.6	61.4	64.4	66.6	69.5	72.2	72.2	73.6	73.9	73.9	73.9	73.9	73.9	73.9
GE 140	47.5	60.1	62.4	70.5	76.6	80.0	83.1	86.8	86.8	89.5	90.5	91.2	91.2	91.2	91.2	91.2
GE 120	47.5	63.4	66.5	70.9	76.9	80.7	83.7	87.8	89.5	90.8	91.9	92.5	93.2	93.2	93.2	93.6
GE 100	47.8	64.1	67.5	71.5	77.5	81.4	84.4	88.5	90.2	91.5	92.5	93.2	93.9	93.9	94.2	94.2
GE 80	47.8	64.1	67.5	71.5	77.5	81.										

TOTAL NUMBER OF OBSERVATIONS: 296.

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86

MONTH: DEC HOURS(LST): 0900-1100

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS																	
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30	40
NO CEIL	15.5	18.2	19.9	21.9	25.6	25.9	26.3	28.6	29.3	29.6	29.6	30.0	30.0	30.0	30.0	30.0	30.0	30.0
GE 20000	16.5	19.2	20.9	22.9	26.6	26.9	27.3	30.0	30.6	31.0	31.0	31.3	31.3	31.3	31.3	31.3	31.3	31.3
GE 18000	16.5	19.2	20.9	22.9	26.6	26.9	27.3	30.0	30.6	31.0	31.0	31.3	31.3	31.3	31.3	31.3	31.3	31.3
GE 16000	16.5	19.2	20.9	22.9	26.6	26.9	27.3	30.0	30.6	31.0	31.0	31.3	31.3	31.3	31.3	31.3	31.3	31.3
GE 14000	16.5	19.2	20.9	22.9	26.6	26.9	27.3	30.0	30.6	31.0	31.0	31.3	31.3	31.3	31.3	31.3	31.3	31.3
GE 12000	16.5	19.2	20.9	22.9	26.6	26.9	27.3	30.0	30.6	31.0	31.0	31.3	31.3	31.3	31.3	31.3	31.3	31.3
GE 10000	22.2	25.9	28.3	31.0	35.0	36.0	36.4	39.1	39.7	40.1	40.1	40.4	40.4	40.4	40.4	40.4	40.4	40.4
GE 9000	22.2	25.9	28.3	31.0	35.0	36.0	36.4	39.1	39.7	40.1	40.1	40.4	40.4	40.4	40.4	40.4	40.4	40.4
GE 8000	22.2	25.9	28.3	31.0	35.0	36.0	36.4	39.1	39.7	40.1	40.1	40.4	40.4	40.4	40.4	40.4	40.4	40.4
GE 7000	22.2	25.9	28.3	31.0	35.0	36.0	36.4	39.1	39.7	40.1	40.1	40.4	40.4	40.4	40.4	40.4	40.4	40.4
GE 6000	22.2	25.9	28.3	31.0	35.0	36.0	36.4	39.1	39.7	40.1	40.1	40.4	40.4	40.4	40.4	40.4	40.4	40.4
GE 5000	22.2	25.9	28.3	31.0	35.0	36.0	36.4	39.1	39.7	40.1	40.1	40.4	40.4	40.4	40.4	40.4	40.4	40.4
GE 4000	22.9	26.6	29.0	31.6	35.7	36.7	37.0	39.7	40.4	40.7	40.7	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE 3000	23.6	27.5	30.2	33.3	37.4	38.7	39.1	41.6	42.4	42.6	42.6	43.1	43.1	43.1	43.1	43.1	43.1	43.1
GE 2000	23.9	28.3	30.6	33.7	37.7	39.1	39.4	42.1	42.8	43.1	43.1	43.4	43.4	43.4	43.4	43.4	43.4	43.4
GE 1000	26.3	30.6	33.0	36.0	40.1	41.4	41.8	44.4	45.1	45.5	45.5	45.8	45.8	45.8	45.8	45.8	45.8	45.8
GE 20000	34.7	42.8	45.5	49.6	54.5	57.2	57.9	61.6	62.6	63.3	63.3	63.6	63.6	63.6	63.6	63.6	63.6	63.6
GE 18000	35.0	44.1	47.1	51.2	55.9	58.6	59.3	63.0	64.0	64.6	64.6	65.0	65.0	65.0	65.0	65.0	65.0	65.0
GE 16000	36.7	44.2	47.6	51.9	56.6	59.3	59.9	63.6	64.6	65.3	65.3	65.7	65.7	65.7	65.7	65.7	65.7	65.7
GE 14000	37.7	45.8	48.6	53.5	58.2	61.3	62.0	65.7	66.7	67.3	67.3	67.7	67.7	67.7	67.7	67.7	67.7	67.7
GE 12000	44.8	56.2	59.9	65.7	72.4	77.8	79.1	84.5	86.2	87.9	87.9	88.9	89.2	89.6	89.6	89.6	89.6	89.6
GE 10000	45.8	57.2	67.9	66.7	73.7	79.1	80.5	85.9	87.5	89.2	89.2	90.2	90.2	90.6	90.9	90.9	90.9	90.9
GE 9000	46.1	56.2	62.0	67.7	74.7	80.1	81.5	86.9	88.6	90.2	90.2	91.2	91.2	91.6	91.9	91.9	91.9	91.9
GE 8000	46.1	58.2	62.0	67.7	74.7	80.1	81.5	86.9	88.6	90.2	90.2	91.2	91.2	91.6	91.9	91.9	91.9	91.9
GE 7000	46.5	58.9	62.6	68.7	76.1	81.8	83.2	88.6	90.2	91.9	91.9	93.3	93.3	93.6	93.9	93.9	93.9	93.9
GE 6000	46.5	58.9	63.0	69.4	76.8	82.8	84.2	89.6	91.2	92.9	92.9	94.3	94.3	94.6	94.9	94.9	94.9	94.9
GE 5000	46.5	59.3	63.3	69.7	77.1	83.2	84.5	90.2	91.9	93.6	93.6	94.9	94.9	95.3	95.6	95.6	95.6	95.6
GE 4000	46.5	59.6	63.6	70.0	77.4	83.5	84.8	90.9	92.6	94.3	94.3	94.6	94.6	96.0	96.3	96.6	96.6	96.6
GE 3000	46.5	59.6	63.6	70.0	77.8	83.8	85.2	92.3	93.9	95.6	95.6	96.0	96.0	97.3	97.6	98.0	98.0	98.0
GE 2000	46.5	59.6	63.6	70.0	77.8	83.8	85.5	92.6	94.3	96.0	96.0	96.3	96.3	97.6	98.7	99.0	99.0	99.0
GE 1000	46.5	59.6	63.6	70.0	77.8	83.8	85.5	92.6	94.3	96.0	96.0	96.3	96.3	97.6	98.7	99.3	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS: 247

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201120 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC POLARSIST: 1200-1400

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
NO CEIL	10.3	16.7	17.0	19.0	27.0	23.0	24.3	26.0	27.7	28.0	29.3	29.7	29.7	29.0	29.0	29.0
GE 3000	15.0	19.7	23.0	22.3	23.3	26.3	27.7	29.3	31.0	31.3	31.7	32.0	32.0	32.3	32.3	32.3
GE 1800	15.0	19.7	20.0	22.3	23.3	26.3	27.7	29.3	31.0	31.3	31.7	32.0	32.0	32.3	32.3	32.3
GE 1600	15.0	19.7	20.0	22.3	23.3	26.3	27.7	29.3	31.0	31.3	31.7	32.0	32.0	32.3	32.3	32.3
GE 1400	15.0	19.7	20.0	22.3	23.3	26.3	27.7	29.3	31.0	31.3	31.7	32.0	32.0	32.3	32.3	32.3
GE 1200	15.0	19.7	20.0	22.3	23.3	26.3	27.7	29.3	31.0	31.3	31.7	32.0	32.0	32.3	32.3	32.3
GE 1000	23.7	29.7	31.0	34.0	35.7	36.7	40.7	43.3	45.0	45.3	45.7	46.0	46.0	46.3	46.3	46.3
GE 900	23.7	29.7	31.0	34.0	35.7	36.7	40.7	43.3	45.0	45.3	45.7	46.0	46.0	46.3	46.3	46.3
GE 800	23.7	29.7	31.0	34.0	35.7	36.7	40.7	43.3	45.0	45.3	45.7	46.0	46.0	46.3	46.3	46.3
GE 700	23.7	29.7	31.0	34.0	35.7	36.7	40.7	43.3	45.0	45.3	45.7	46.0	46.0	46.3	46.3	46.3
GE 600	23.7	29.7	31.0	34.0	35.7	36.7	40.7	43.3	45.0	45.3	45.7	46.0	46.0	46.3	46.3	46.3
GE 500	23.7	29.7	31.0	34.0	35.7	36.7	40.7	43.3	45.0	45.3	45.7	46.0	46.0	46.3	46.3	46.3
GE 400	29.7	35.7	37.3	38.0	40.3	42.0	44.0	46.3	47.0	47.3	47.7	48.0	48.0	48.0	48.0	48.0
GE 300	29.7	35.7	37.3	38.0	40.3	42.0	44.0	46.3	47.0	47.3	47.7	48.0	48.0	48.0	48.0	48.0
GE 250	35.7	44.7	46.7	50.0	51.7	55.3	57.7	60.7	63.7	64.3	64.7	65.3	65.3	65.7	66.0	66.0
GE 200	39.0	47.0	49.0	52.3	54.3	58.0	60.3	63.3	66.3	67.0	67.3	68.0	68.0	68.7	69.0	69.0
GE 180	39.7	47.7	49.7	53.0	55.0	58.7	61.0	64.0	67.0	67.7	68.0	68.7	68.7	69.3	69.7	69.7
GE 160	39.3	48.3	50.3	54.0	56.0	59.7	62.0	65.0	68.0	69.7	69.0	69.7	69.7	70.3	70.7	70.7
GE 140	45.3	54.0	60.7	64.3	67.3	72.0	74.7	79.7	84.7	86.3	87.7	89.3	89.7	90.7	91.0	91.0
GE 1000	46.7	55.3	62.0	65.7	68.7	73.3	76.0	81.0	86.0	87.7	89.7	90.7	91.0	92.0	92.3	92.3
GE 900	46.7	55.3	62.0	65.7	68.7	73.3	76.0	81.0	86.0	87.7	89.7	90.7	91.0	92.0	92.3	92.3
GE 800	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 700	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 600	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 500	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 400	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 300	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 200	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 100	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 500	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 400	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 300	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 200	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 100	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 500	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 400	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 300	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 200	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 100	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 500	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 400	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 300	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 200	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 100	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 500	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 400	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 300	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 200	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 100	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 500	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 400	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 300	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 200	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 100	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 500	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 400	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 300	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 200	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 100	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 500	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 400	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 300	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 200	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 100	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 500	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 400	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 300	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 200	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 100	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 500	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 400	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86.7	88.3	89.7	91.3	91.7	92.7	93.0	93.0
GE 300	47.3	55.7	62.7	66.3	69.3	74.0	76.7	81.7	86							

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURTY OBSERVATIONS

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS(LST): 1500-1700

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
NO CEIL	12.1	15.4	16.4	20.0	22.5	24.6	26.2	28.2	29.2	29.8	29.9	30.2	30.5	30.5	30.5	30.5
GE 00000	15.1	16.0	19.0	22.6	25.2	27.9	29.5	32.1	33.1	34.1	34.1	34.4	34.8	34.8	34.8	34.8
GE 10000	15.1	16.0	19.0	22.6	25.2	27.9	29.5	32.1	33.1	34.1	34.1	34.4	34.8	34.8	34.8	34.8
GE 16000	15.1	16.0	19.0	22.6	25.2	27.9	29.5	32.1	33.1	34.1	34.1	34.4	34.8	34.8	34.8	34.8
GE 14000	15.1	16.0	19.0	22.6	25.2	27.9	29.5	32.1	33.1	34.1	34.1	34.4	34.8	34.8	34.8	34.8
GE 12000	15.1	16.0	19.0	22.6	25.2	27.9	29.5	32.1	33.1	34.1	34.1	34.4	34.8	34.8	34.8	34.8
GE 10000	22.6	27.2	28.5	32.1	35.7	39.0	40.7	43.6	44.6	46.2	46.2	46.6	46.9	46.9	46.9	46.9
GE 9000	22.6	27.2	28.5	32.1	35.7	39.0	40.7	43.6	44.6	46.2	46.2	46.6	46.9	46.9	46.9	46.9
GE 8000	22.6	27.2	28.5	32.1	35.7	39.0	40.7	43.6	44.6	46.2	46.2	46.6	46.9	46.9	46.9	46.9
GE 7000	22.6	27.2	28.5	32.1	35.7	39.0	40.7	43.6	44.6	46.2	46.2	46.6	46.9	46.9	46.9	46.9
GE 6000	22.6	27.2	28.5	32.1	35.7	39.0	40.7	43.6	44.6	46.2	46.2	46.6	46.9	46.9	46.9	46.9
GE 5000	23.3	27.9	29.2	32.8	36.4	39.7	41.3	44.3	45.0	46.9	46.9	47.2	47.5	47.5	47.5	47.5
GE 4500	23.3	27.9	29.2	32.8	36.4	39.7	41.3	44.3	45.0	46.9	46.9	47.2	47.5	47.5	47.5	47.5
GE 4000	24.9	29.5	33.8	34.4	38.0	41.6	43.3	46.2	47.0	48.9	48.9	49.2	49.5	49.5	49.5	49.5
GE 3500	24.9	29.5	33.8	34.4	38.0	41.6	43.3	46.2	47.0	48.9	48.9	49.2	49.5	49.5	49.5	49.5
GE 3000	25.2	29.8	31.1	34.8	38.4	42.0	43.6	46.6	47.5	49.2	49.2	49.5	49.8	49.8	49.8	49.8
GE 2500	32.1	41.3	43.0	47.5	51.1	54.6	56.7	60.3	62.3	63.9	64.6	65.2	65.9	66.2	66.2	66.6
GE 2000	33.6	43.0	44.6	49.2	52.8	56.4	58.4	62.0	63.9	66.2	66.9	67.5	68.2	68.5	68.9	68.9
GE 1800	35.7	44.9	46.6	51.1	54.6	58.4	60.3	63.9	65.9	68.2	68.9	69.5	70.2	70.5	70.8	70.8
GE 1600	37.4	46.9	48.5	53.1	56.7	60.3	62.3	65.9	67.9	70.2	70.9	71.5	72.1	72.5	72.5	72.8
GE 1400	43.6	54.6	57.0	62.6	67.2	72.5	75.7	80.3	83.6	87.5	88.9	90.2	91.5	92.5	92.5	92.8
GE 1200	44.9	56.1	58.4	63.9	68.5	73.8	77.4	82.0	85.2	89.2	90.5	91.8	93.1	94.1	94.1	94.4
GE 1000	45.2	56.4	58.7	64.3	68.9	74.1	77.7	82.3	85.6	89.5	90.8	92.1	93.4	94.4	94.4	94.8
GE 900	45.0	56.4	58.7	64.3	68.9	74.1	77.7	82.3	85.6	89.5	90.8	92.1	93.4	94.4	94.4	94.8
GE 800	45.2	56.7	59.0	64.6	69.5	74.8	78.4	83.0	86.6	90.8	92.1	93.8	95.1	96.4	96.4	96.7
GE 700	45.2	56.7	59.0	64.6	69.5	74.8	78.4	83.3	86.9	91.1	92.9	94.1	95.4	96.7	96.7	97.0
GE 600	45.2	56.7	59.0	64.6	69.5	74.8	78.4	83.3	86.9	91.1	92.9	94.1	95.4	96.7	96.7	97.0
GE 500	45.2	56.7	59.0	64.6	69.5	74.8	78.4	83.3	86.9	91.1	92.9	94.1	95.4	96.7	96.7	97.0
GE 400	45.2	56.7	59.0	64.6	69.5	74.8	78.4	83.3	86.9	91.1	92.9	94.1	95.4	96.7	96.7	97.0
GE 300	45.2	56.7	59.0	64.6	69.5	74.8	78.4	83.3	86.9	91.1	92.9	94.1	95.4	96.7	96.7	97.0
GE 200	45.2	56.7	59.0	64.6	69.5	74.8	78.4	83.3	86.9	91.1	92.9	94.1	95.4	96.7	96.7	97.0
GE 100	45.2	56.7	59.0	64.6	69.5	74.8	78.4	83.3	86.9	91.1	92.9	94.1	95.4	96.7	96.7	97.0
GE 0	45.2	56.7	59.0	64.6	69.5	74.8	78.4	83.3	86.9	91.1	92.9	94.1	95.4	96.7	96.7	97.0

TOTAL NUMBER OF OBSERVATIONS: 335

GLOBAL CLIMATOLOGY BRANCH
USAF/CLAC
AIR WEATHER SERVICE/PAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 22113E STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS(IST): 1800-2300

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 1	GE 160	GE 50	GE 80	GE 60	GE 40	GE 40	GE 32	GE 24	GE 20	GE 16	GE 12	GE 10	GE 8	GE 5	GE 4
NO CEIL	16.9	19.0	20.7	23.1	26.1	27.5	27.5	29.8	29.9	30.2	30.5	30.5	30.5	30.5	30.5	30.8
GE 20000	20.3	23.1	24.7	27.1	30.2	31.5	31.5	33.9	34.2	34.6	34.9	34.9	34.9	34.9	34.9	35.3
GE 18000	20.3	23.1	24.7	27.1	30.2	31.5	31.5	33.9	34.2	34.6	34.9	34.9	34.9	34.9	34.9	35.3
GE 16000	20.3	23.1	24.7	27.1	30.2	31.5	31.5	33.9	34.2	34.6	34.9	34.9	34.9	34.9	34.9	35.3
GE 14000	20.3	23.1	24.7	27.1	30.2	31.5	31.5	33.9	34.2	34.6	34.9	34.9	34.9	34.9	34.9	35.3
GE 12000	20.3	23.1	24.7	27.1	30.2	31.5	31.5	33.9	34.2	34.6	34.9	34.9	34.9	34.9	34.9	35.3
GE 10000	27.5	30.8	32.5	35.6	39.0	40.3	41.0	44.1	44.4	44.7	45.1	45.1	45.1	45.1	45.1	45.8
GE 9000	27.5	30.8	32.5	35.6	39.0	40.3	41.0	44.1	44.4	44.7	45.1	45.1	45.1	45.1	45.1	45.8
GE 8000	27.5	30.8	32.5	35.6	39.0	40.3	41.0	44.1	44.4	44.7	45.1	45.1	45.1	45.1	45.1	45.8
GE 7000	27.8	31.2	32.9	35.9	39.3	40.7	41.4	44.4	44.7	45.1	45.4	45.4	45.4	45.4	45.4	46.1
GE 6000	27.8	31.2	32.9	35.9	39.3	40.7	41.4	44.4	44.7	45.1	45.4	45.4	45.4	45.4	45.4	46.1
GE 5000	28.1	31.6	33.6	36.6	40.0	41.4	42.0	45.1	45.4	45.8	46.1	46.1	46.1	46.1	46.1	46.8
GE 4500	28.8	32.2	33.9	36.9	40.3	41.7	42.4	45.4	45.8	46.1	46.4	46.4	46.4	46.4	46.4	47.1
GE 4000	29.5	32.9	34.6	37.6	41.0	42.4	43.0	46.4	46.8	47.1	47.5	47.5	47.5	47.5	47.5	48.1
GE 3500	29.8	33.6	35.3	38.3	41.7	43.4	44.7	47.8	48.1	48.5	48.8	48.8	48.8	48.8	48.8	49.5
GE 3000	30.5	34.2	35.9	39.0	42.4	44.1	45.4	48.5	48.8	49.2	49.5	49.5	49.5	49.5	49.5	50.2
GE 2500	41.0	46.4	48.5	51.9	56.3	59.0	60.7	63.7	64.4	64.7	65.4	65.4	66.1	66.1	66.1	66.8
GE 2000	42.7	48.5	50.5	53.9	58.3	61.0	62.7	65.8	66.4	66.8	67.5	67.5	68.1	68.1	68.1	68.8
GE 1800	43.7	49.5	51.5	54.9	59.3	62.0	63.7	66.8	67.5	67.8	68.5	68.5	69.2	69.2	69.2	69.6
GE 1600	45.1	50.4	53.2	56.6	61.0	63.7	65.4	68.5	69.2	69.5	70.2	70.2	70.9	70.9	70.9	71.5
GE 1400	46.2	50.0	52.0	57.1	61.7	64.3	66.0	69.1	69.8	70.1	70.8	70.8	71.5	71.5	71.5	72.2
GE 1200	49.5	59.3	62.4	67.5	73.2	76.6	78.3	81.0	81.7	82.0	82.7	83.4	84.1	84.1	84.1	84.8
GE 1000	49.5	59.3	62.4	67.5	73.2	76.6	78.3	81.0	81.7	82.0	82.7	83.4	84.1	84.1	84.1	84.8
GE 800	49.5	59.3	62.4	67.5	73.2	76.6	78.3	81.0	81.7	82.0	82.7	83.4	84.1	84.1	84.1	84.8
GE 700	49.5	59.3	62.4	67.5	73.2	76.6	78.3	81.0	81.7	82.0	82.7	83.4	84.1	84.1	84.1	84.8
GE 600	50.2	60.3	63.4	68.5	74.6	78.0	80.7	83.8	84.5	84.8	85.5	85.5	86.2	86.2	86.2	86.9
GE 500	50.2	60.3	63.4	68.5	74.6	78.0	80.7	83.8	84.5	84.8	85.5	85.5	86.2	86.2	86.2	86.9
GE 400	50.2	60.3	63.4	68.5	74.6	78.0	80.7	83.8	84.5	84.8	85.5	85.5	86.2	86.2	86.2	86.9
GE 300	50.2	60.3	63.4	68.5	74.6	78.0	80.7	83.8	84.5	84.8	85.5	85.5	86.2	86.2	86.2	86.9
GE 200	50.2	60.3	63.4	68.5	74.6	78.0	80.7	83.8	84.5	84.8	85.5	85.5	86.2	86.2	86.2	86.9
GE 100	50.2	60.3	63.4	68.5	74.6	78.0	80.7	83.8	84.5	84.8	85.5	85.5	86.2	86.2	86.2	86.9

TOTAL NUMBER OF OBSERVATIONS: 295

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 271137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC HOURS (LST): 2100-2300

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46
NO CEIL	19.7	21.7	22.7	25.1	28.1	29.4	30.1	32.4	33.1	33.6	37.8	34.1	34.1	34.1	34.1	34.1
GE 20000	21.4	23.7	24.7	27.1	30.1	31.8	32.4	34.8	35.5	36.1	36.1	36.5	36.5	36.5	36.5	36.5
GE 18000	21.4	23.7	24.7	27.1	30.1	31.8	32.4	34.8	35.5	36.1	36.1	36.5	36.5	36.5	36.5	36.5
GE 16000	21.4	23.7	24.7	27.1	30.1	31.8	32.4	34.8	35.5	36.1	36.1	36.5	36.5	36.5	36.5	36.5
GE 14000	21.4	23.7	24.7	27.1	30.1	31.8	32.4	34.8	35.5	36.1	36.1	36.5	36.5	36.5	36.5	36.5
GE 12000	21.4	23.7	24.7	27.1	30.1	31.8	32.4	34.8	35.5	36.1	36.1	36.5	36.5	36.5	36.5	36.5
GE 10000	29.8	34.1	35.1	37.5	40.5	42.1	43.1	46.2	46.8	47.8	47.8	48.2	48.5	48.5	48.5	48.5
GE 9000	29.8	34.1	35.1	37.5	40.5	42.1	43.1	46.2	46.8	47.8	47.8	48.2	48.5	48.5	48.5	48.5
GE 8000	29.8	34.1	35.1	37.5	40.5	42.1	43.1	46.2	46.8	47.8	47.8	48.2	48.5	48.5	48.5	48.5
GE 7000	29.8	34.1	35.1	37.5	40.5	42.1	43.1	46.2	46.8	47.8	47.8	48.2	48.5	48.5	48.5	48.5
GE 6000	29.8	34.1	35.1	37.5	40.5	42.1	43.1	46.2	46.8	47.8	47.8	48.2	48.5	48.5	48.5	48.5
GE 5000	29.8	34.4	35.5	37.6	40.8	42.5	43.5	46.5	47.2	48.2	48.2	48.5	48.8	48.8	48.8	48.8
GE 4500	29.1	34.8	35.9	38.1	41.1	42.8	43.8	46.8	47.5	48.5	48.5	48.8	49.2	49.2	49.2	49.2
GE 4000	30.8	36.5	37.5	40.1	43.1	44.8	45.8	48.8	49.5	50.5	50.5	50.8	51.2	51.2	51.2	51.2
GE 3500	30.8	36.5	37.5	40.1	43.1	44.8	45.8	48.8	49.5	50.5	50.5	50.8	51.2	51.2	51.2	51.2
GE 3000	31.1	37.1	38.5	41.1	44.1	45.8	46.8	49.8	50.5	51.5	51.5	51.8	52.2	52.2	52.2	52.2
GE 2500	32.8	46.5	49.2	52.8	56.5	58.5	59.5	62.9	64.2	65.2	65.2	65.9	66.6	66.6	66.6	66.9
GE 2000	40.8	48.5	50.2	55.2	58.9	60.9	61.9	65.2	66.6	67.6	67.6	68.2	68.9	68.9	68.9	69.2
GE 1800	42.1	49.8	51.5	56.5	60.2	62.2	63.2	66.6	67.9	68.9	68.9	69.6	70.2	70.2	70.2	70.6
GE 1600	47.1	51.2	52.5	57.9	61.5	63.5	64.5	67.9	69.2	70.2	70.2	70.9	71.6	71.6	71.6	71.9
GE 1400	44.5	54.5	51.5	67.6	71.6	74.9	77.6	82.3	84.6	87.3	87.3	89.0	89.6	89.6	89.6	90.0
GE 1200	49.2	59.2	62.5	68.6	72.9	76.3	79.9	83.6	86.0	88.6	89.3	90.3	91.0	91.0	91.0	91.3
GE 1000	49.5	59.5	62.9	68.9	73.2	76.6	79.3	83.9	86.3	89.0	89.6	90.6	91.3	91.3	91.3	91.6
GE 900	49.5	59.5	62.9	69.2	73.6	76.9	79.6	84.3	86.6	89.6	89.6	90.3	91.3	92.0	92.0	92.3
GE 800	49.6	63.2	63.5	70.6	75.1	78.6	81.3	86.0	88.3	91.3	91.3	92.0	93.6	93.6	93.6	94.0
GE 700	49.8	60.5	63.9	71.2	75.9	79.3	81.9	86.6	89.0	92.0	92.6	93.6	94.3	94.3	94.3	94.6
GE 600	49.8	60.9	64.2	71.6	76.6	79.9	83.3	88.0	90.3	93.3	94.0	95.0	95.7	95.7	95.7	96.0
GE 500	50.5	61.5	64.9	72.6	77.6	80.9	84.3	89.3	91.6	94.6	95.3	96.7	97.3	97.3	97.3	97.7
GE 400	50.8	61.9	65.2	72.9	78.3	81.6	84.9	90.0	92.3	95.7	96.3	97.7	98.3	98.3	98.3	98.7
GE 300	50.8	61.9	65.2	72.9	78.3	81.6	84.9	90.0	92.3	95.7	96.3	97.7	98.3	98.3	98.3	98.7
GE 200	50.8	61.9	65.2	72.9	78.3	81.6	84.9	90.0	92.3	95.7	96.3	97.7	98.3	98.3	98.3	98.7
GE 100	50.8	61.9	65.2	72.9	78.3	81.6	84.9	90.0	92.3	95.7	96.3	97.7	98.3	98.3	98.3	98.7

TOTAL NUMBER OF OBSERVATIONS: 299

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM FOURPLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86

MONTH: DEC HOURS(LST): ALL

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GT 160	GE 20	GE 30	GE 40	GE 46	GE 40	GE 32	GF 24	GE 20	GE 16	SL 12	GE 10	GE 8	GE 5	GE 4	GE 0
NO CEIL	16.0	19.2	20.4	22.8	25.6	27.1	28.0	30.0	30.7	31.1	31.3	31.5	31.5	31.6	31.6	
GE 20000	17.9	21.3	22.6	25.1	28.0	29.5	30.4	32.5	33.3	33.8	37.9	34.1	34.2	34.2	34.2	34.3
GE 18000	17.9	21.3	22.6	25.1	28.0	29.5	30.4	32.5	33.3	33.8	37.9	34.1	34.2	34.2	34.2	34.3
GE 16000	17.9	21.3	22.6	25.1	28.0	29.5	30.4	32.5	33.3	33.8	37.9	34.1	34.2	34.2	34.2	34.3
GE 14000	17.9	21.3	22.6	25.1	28.0	29.5	30.4	32.5	33.3	33.8	37.9	34.1	34.2	34.2	34.2	34.3
GE 12000	17.9	21.3	22.6	25.1	28.0	29.5	30.4	32.5	33.3	33.8	37.9	34.1	34.2	34.2	34.2	34.3
GE 10000	25.4	30.3	31.9	34.7	38.0	39.7	41.0	43.6	44.5	45.2	45.4	45.6	45.7	45.7	45.7	45.8
GE 9000	25.4	30.3	31.9	34.7	38.0	39.7	41.0	43.6	44.5	45.2	45.4	45.6	45.7	45.7	45.7	45.8
GE 8000	25.4	30.3	31.9	34.7	38.0	39.7	41.0	43.6	44.5	45.2	45.4	45.6	45.7	45.7	45.7	45.8
GE 7000	25.4	30.3	32.0	34.7	38.0	39.8	41.1	43.7	44.6	45.3	45.4	45.6	45.7	45.8	45.8	45.9
GE 6000	25.4	30.3	32.0	34.7	38.0	39.8	41.1	43.7	44.6	45.3	45.4	45.6	45.7	45.8	45.8	45.9
GE 5000	25.7	30.6	32.3	35.1	38.3	40.1	41.4	44.1	44.9	45.7	45.8	46.0	46.1	46.2	46.2	46.2
GE 4500	26.2	31.1	32.6	35.5	38.9	40.6	41.8	44.5	45.4	46.1	46.2	46.4	46.5	46.6	46.6	46.7
GE 4000	27.3	32.4	34.1	37.0	40.2	42.1	43.4	46.1	46.9	47.7	47.8	48.0	48.1	48.2	48.2	48.2
GE 3500	27.7	32.9	34.6	37.5	40.7	42.6	44.0	46.7	47.5	48.2	48.4	48.6	48.7	48.7	48.7	48.8
GE 3000	28.4	33.6	35.4	38.3	41.6	43.4	44.8	47.5	48.4	49.1	49.2	49.4	49.5	49.6	49.6	49.7
GE 2500	37.4	45.4	47.7	51.3	55.1	57.7	59.4	62.7	64.0	65.0	65.7	65.6	65.9	66.0	66.1	66.2
GE 2000	39.3	47.4	49.7	53.4	57.3	59.8	61.6	64.9	66.3	67.3	67.6	67.9	68.2	68.4	68.4	68.6
GE 1500	40.6	48.9	51.2	54.9	58.8	61.4	63.2	66.4	67.9	68.9	69.1	69.5	69.8	69.9	70.0	70.2
GF 1000	41.8	50.5	52.8	56.6	60.5	63.1	64.9	68.1	69.6	70.6	70.9	71.2	71.5	71.7	71.7	71.9
GE 1000	46.7	56.5	61.7	66.6	72.2	76.0	79.1	83.9	86.3	88.3	89.2	89.9	90.6	91.0	91.1	91.3
GF 1000	47.4	59.4	62.6	67.6	73.3	77.2	80.3	85.1	87.6	89.5	90.3	91.1	91.8	92.3	92.4	92.6
GE 500	47.8	59.9	63.1	68.2	73.9	77.8	80.9	85.7	88.2	90.1	90.9	91.8	92.4	92.9	93.0	93.2
GE 300	48.0	60.1	63.3	68.5	74.2	78.1	81.2	86.1	88.5	90.5	91.3	92.1	92.8	93.3	93.4	93.6
GE 200	48.3	60.8	64.0	69.4	75.3	79.3	82.6	87.5	90.0	92.0	92.8	93.8	94.4	95.0	95.1	95.3
GE 100	48.5	61.0	64.3	69.9	75.8	79.8	83.2	88.1	90.6	92.6	93.4	94.4	95.1	95.6	95.7	95.9
GE 500	48.5	61.1	64.5	70.0	76.0	80.1	83.5	88.5	91.0	93.0	93.8	94.8	95.4	96.0	96.1	96.3
GE 400	48.6	61.3	64.7	70.3	76.3	80.5	84.0	89.5	92.1	94.1	95.2	96.2	96.9	97.4	97.5	97.7
GE 300	48.6	61.4	64.9	70.4	76.6	80.9	84.4	90.2	92.8	95.1	96.1	97.1	97.8	98.3	98.5	98.7
GE 200	48.6	61.4	64.6	70.4	76.6	80.9	84.5	90.3	92.9	95.2	96.2	97.2	98.3	99.1	99.2	99.5
GF 100	48.6	61.4	64.6	70.4	76.6	80.9	84.5	90.3	92.9	95.2	96.2	97.2	98.3	99.3	99.5	99.8
GE 0	48.6	61.4	64.6	70.4	76.6	80.9	84.5	90.3	92.9	95.2	96.2	97.2	98.3	99.3	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS: 2392

GLOBAL CLIMATOLOGY BRANCH
USAF/CLTAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-87
MONTH: ALL HOURS (LST): ALL

CEILING IN FEET	VISIBILITY IN HUNDREDS OF METERS															
	GE 160	GE 200	GE 250	GE 300	GE 400	GE 500	GE 600	GE 700	GE 800	GE 900	GE 1000	GE 1200	GE 1400	GE 1600	GE 1800	GE 2000
NO CEIL	27.4	22.7	23.4	24.3	25.2	25.9	26.3	26.8	27.1	27.3	27.4	27.5	27.6	27.6	27.6	27.6
GE 20000	23.1	25.7	26.4	27.4	28.4	29.1	29.6	30.1	30.4	30.6	30.7	30.8	30.9	30.9	30.9	31.0
GE 18000	23.1	25.7	26.4	27.4	28.4	29.1	29.6	30.1	30.4	30.6	30.7	30.8	30.9	30.9	30.9	31.0
GE 16000	23.1	25.7	26.4	27.4	28.4	29.1	29.6	30.1	30.4	30.6	30.7	30.8	30.9	30.9	30.9	31.0
GE 14000	23.1	25.7	26.4	27.4	28.4	29.1	29.6	30.1	30.4	30.6	30.7	30.8	30.9	30.9	30.9	31.0
GE 12000	23.1	25.7	26.4	27.4	28.4	29.1	29.6	30.1	30.4	30.6	30.7	30.8	30.9	30.9	30.9	31.0
GE 10000	32.7	36.6	37.6	38.9	40.1	41.2	41.8	42.7	43.1	43.4	43.5	43.6	43.7	43.7	43.7	43.8
GE 9000	32.7	36.6	37.6	38.9	40.1	41.2	41.8	42.7	43.1	43.4	43.5	43.6	43.7	43.7	43.7	43.8
GE 8000	32.7	36.6	37.6	38.9	40.1	41.2	41.8	42.7	43.1	43.4	43.5	43.6	43.7	43.7	43.7	43.8
GE 7000	32.7	36.6	37.6	38.9	40.2	41.2	41.8	42.7	43.1	43.4	43.5	43.6	43.7	43.7	43.8	43.8
GE 6000	32.9	36.7	37.6	39.0	40.2	41.3	41.9	42.7	43.2	43.5	43.5	43.7	43.8	43.8	43.8	43.9
GE 5000	33.4	37.3	38.3	39.6	40.9	41.9	42.5	43.4	43.9	44.1	44.2	44.4	44.5	44.5	44.5	44.5
GE 4000	33.9	37.8	38.6	40.2	41.4	42.5	43.1	44.0	44.4	44.7	44.8	44.9	45.0	45.0	45.0	45.1
GE 3000	37.5	41.7	42.7	44.2	45.4	46.5	47.2	48.1	48.5	48.8	48.9	49.0	49.1	49.2	49.2	49.2
GE 2000	39.5	42.8	43.3	45.2	46.5	47.6	48.2	49.1	49.6	49.9	50.0	50.1	50.2	50.2	50.3	50.3
GE 1000	39.8	44.2	45.3	46.7	48.0	49.1	49.8	50.7	51.1	51.4	51.5	51.6	51.7	51.8	51.8	51.8
GE 2000	52.6	60.1	61.0	63.4	65.0	66.5	67.3	68.5	69.3	69.6	69.7	69.9	70.1	70.1	70.1	70.2
GE 2000	55.7	62.4	63.6	65.8	67.4	68.9	69.8	71.0	71.7	72.0	72.2	72.4	72.5	72.6	72.6	72.7
GE 2000	58.7	63.0	65.0	67.0	68.6	70.1	71.0	72.2	72.9	73.3	73.4	73.6	73.8	73.8	73.9	73.9
GE 1000	58.3	65.5	66.9	69.0	70.6	72.2	73.1	74.3	75.1	75.4	75.6	75.8	75.9	75.9	76.0	76.0
GE 1000	65.0	75.9	77.8	80.7	83.1	85.3	86.7	88.7	90.0	90.8	91.0	91.4	91.7	91.8	91.9	92.0
GE 1000	67.0	77.3	79.2	82.2	84.7	87.0	88.4	90.4	91.8	92.5	92.9	93.2	93.5	93.6	93.6	93.7
GE 500	67.4	77.9	79.9	83.0	85.5	87.8	89.2	91.3	92.6	93.4	93.7	94.1	94.4	94.5	94.5	94.6
GE 500	67.7	78.4	80.4	83.6	86.1	88.4	89.9	91.9	93.3	94.1	94.4	94.7	95.0	95.2	95.2	95.3
GE 500	68.1	78.2	81.4	84.6	87.2	89.7	91.1	93.3	94.7	95.5	95.8	96.2	96.5	96.7	96.7	96.8
GE 500	68.2	79.4	81.6	85.0	87.7	90.1	91.6	93.8	95.3	96.1	96.4	96.8	97.1	97.2	97.3	97.3
GE 500	68.2	79.6	81.8	85.2	87.9	90.4	91.9	94.1	95.6	96.5	96.9	97.2	97.5	97.6	97.7	97.7
GE 500	68.3	79.7	82.0	85.5	88.2	90.8	92.4	94.7	96.2	97.2	97.5	97.9	98.2	98.4	98.4	98.5
GE 500	68.3	79.7	82.0	85.5	88.3	90.9	92.5	94.9	96.5	97.5	97.8	98.2	98.5	98.7	98.7	98.8
GE 500	68.3	79.8	82.1	85.6	88.4	91.0	92.6	95.0	96.6	97.5	97.9	98.3	98.9	99.2	99.3	99.3
GE 500	68.3	79.8	82.1	85.6	88.4	91.0	92.6	95.0	96.6	97.6	97.9	98.4	99.0	99.4	99.5	99.8
GE 500	68.3	79.8	82.1	85.6	88.4	91.0	92.6	95.0	96.6	97.6	97.9	98.4	99.0	99.4	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS: 26177

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 7A-87
MONTH: JAN

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	15.6	2.0		7.8	5.1	1.7	3.7		10.2	24.8	28.9	6.7	294
03-05	15.0	1.7		7.3	4.3	.7	4.7		8.0	30.3	28.0	6.9	300
06-08	15.6	2.4		7.9	3.8	1.4	2.4		8.2	30.1	28.1	6.8	292
09-11	13.0	3.7		9.3	6.3	.7	3.3		9.0	29.7	25.0	6.7	300
12-14	7.3	4.5		6.3	2.8	.7	4.6		7.3	38.8	25.6	7.4	289
15-17	6.8	3.9		7.4	6.5	2.3	5.8		6.4	37.5	21.4	7.2	309
18-20	10.1	4.7		10.1	7.1	1.0	6.1		5.7	32.4	22.6	6.7	296
21-23	14.3	2.6		7.5	4.9	1.3	4.2		6.5	31.8	26.9	6.8	308
TOTALS	12.2	3.2		8.2	5.1	1.2	4.4		7.9	31.9	25.8	6.9	2388

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 7A-87
MONTH: FEB

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	13.0	3.0		9.7	3.0	.7	5.6		7.8	34.2	23.0	6.8	269
03-05	17.6	2.9		6.1	3.2	.4	4.7		10.8	33.0	21.5	6.6	279
06-08	17.2	2.2		7.3	3.6	1.5	2.2		10.7	28.1	27.0	6.7	274
09-11	7.3	5.5		10.6	1.8		4.7		6.9	40.5	22.6	7.2	274
12-14	5.7	5.3		8.2	4.3	1.8	6.8		9.3	38.8	19.9	7.2	281
15-17	6.9	4.3		9.7	5.1	1.4	6.1		7.2	41.5	17.7	7.1	277
18-20	6.9	5.1		6.2	6.2	.4	3.6		12.0	36.1	23.4	7.3	274
21-23	17.8	2.9		5.1	6.2	.7	5.1		7.2	34.1	21.0	6.5	276
TOTALS	11.5	3.9		7.9	4.2	.9	4.9		9.0	35.8	22.0	6.9	2204

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAR

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	15.2	1.0		6.6	5.9	1.0	5.6		6.3	33.7	24.8	6.8	303
03-05	15.3	1.6		7.8	6.2	.3	4.2		6.8	26.7	31.3	6.8	307
06-08	11.5	2.3		10.5	4.3	1.6	1.6		7.9	29.3	30.9	7.0	304
09-11	8.1	5.5		6.5	3.9	1.0	5.5		6.2	38.0	25.3	7.2	308
12-14	9.0	6.7		7.7	4.3	1.0	6.0		6.3	38.0	21.0	6.9	300
15-17	11.1	3.9		6.2	6.2	1.0	5.2		11.8	30.4	24.2	6.9	306
18-20	9.2	5.2		10.5	4.9	1.0	5.2		7.5	32.4	24.2	6.9	306
21-23	15.0	3.6		9.4	6.2	1.0	3.2		8.9	33.1	21.8	6.7	308
TOTALS	11.5	3.7		8.2	5.2	1.0	4.6		7.7	32.7	25.4	6.9	2442

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: APR

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	8.7	7.3		11.1	3.5	1.0	3.1		8.0	34.3	23.2	6.8	289
03-05	7.0	5.0		12.1	2.3	.3	3.7		7.4	34.6	27.5	7.2	298
06-08	4.1	4.1		7.2	2.4	.3	3.8		9.2	41.3	27.6	7.8	293
09-11	5.8	4.4		10.2	4.1	1.0	5.4		10.2	35.3	23.7	7.2	295
12-14	2.8	4.8		10.3	4.8	1.0	4.1		9.7	40.3	22.1	7.5	290
15-17	3.7	4.4		7.7	5.4	1.7	8.1		11.1	41.1	16.8	7.3	297
18-20	3.4	2.8		7.2	8.6	3.1	5.5		12.1	32.8	23.4	7.3	290
21-23	5.7	6.4		10.7	2.0	2.0	4.7		10.7	32.2	25.5	7.2	298
TOTALS	5.2	5.0		9.6	4.1	1.3	4.8		9.8	36.5	23.7	7.3	2350

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER
FROM HOURLY OBSERVATIONS

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAY

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	5.3	3.3		9.5	4.6	1.0	2.3		7.2	35.5	11.3	7.6	304
03-05	5.2	1.3		6.8	4.6		2.9		8.5	34.5	16.2	8.0	307
06-08	5.9	3.9		5.9	2.3	.3	2.9		4.9	38.2	15.6	7.9	306
09-11	4.6	3.9		7.2	3.0	.3	3.0		4.9	37.4	15.7	7.9	305
12-14	3.6	4.6		5.6	4.6	.7	2.6		7.2	41.5	29.7	7.9	306
15-17	3.0	3.3		4.6	4.3	1.0	3.3		11.3	43.0	7.2	8.0	302
18-20	4.0	3.0		6.7	5.0	1.7	2.7		9.7	39.5	27.8	7.6	299
21-23	5.2	3.9		6.9	2.6	1.0	4.6		9.8	38.6	27.5	7.7	306
TOTALS	4.6	3.4		6.7	3.9	.8	3.0		7.9	38.5	21.3	7.9	2435

STATION NUMBER: 201137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUN

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	2.7	4.1		9.8	3.7	.3	3.0		7.4	43.2	25.7	7.7	296
03-05	2.7	4.8		8.9	2.7	.7	5.5		7.2	38.2	29.4	7.7	293
06-08	2.7	5.1		3.4	4.1	.3	3.1		8.8	36.9	15.6	8.1	295
09-11	2.7	1.4		5.1	2.4	1.0	3.4		10.2	41.6	12.1	8.3	293
12-14	2.4	2.4		5.1	1.7		3.1		12.9	43.5	28.9	8.3	294
15-17	1.7	1.4		5.8	4.1	.3	5.1		12.2	43.5	25.9	8.2	294
18-20	2.4	4.4		5.4	5.1	2.0	4.7		11.1	39.5	25.3	7.8	296
21-23	2.7	6.1		7.1	3.1	1.7	5.1		6.1	40.3	27.8	7.7	295
TOTALS	2.5	3.7		6.3	3.4	.6	4.1		9.5	47.8	28.8	8.0	2356

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER
FROM HOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	5.6	5.2		7.8	4.6	.3	4.2		8.5	37.3	26.5	7.4	306
03-05	4.2	8.7		5.8	3.6	.3	4.5		8.4	34.0	30.4	7.5	309
06-08	5.5	5.5		6.2	2.6	.7	4.2		7.5	33.9	23.9	7.7	307
09-11	5.2	2.6		6.8	4.2	.3	2.9		5.4	22.8	26.7	7.9	308
12-14	4.5	4.2		5.9	2.6	.7	3.3		12.7	37.9	28.1	7.8	306
15-17	2.7	3.9		7.5	3.6	1.6	3.9		10.5	41.5	24.5	7.7	306
18-20	3.0	1.2		9.5	3.9	1.3	4.6		8.2	37.4	25.9	7.5	305
21-23	4.6	9.8		5.6	3.6	.7	3.0		7.9	39.7	25.2	7.3	305
TOTALS	4.5	5.8		6.9	3.6	.7	3.8		9.0	36.8	28.9	7.6	2452

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: AUG

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	3.0	5.6		8.3	2.0	.7	4.3		7.3	41.4	27.5	7.7	302
03-05	2.6	3.6		7.9	4.6	.7	2.6		6.6	40.6	28.7	7.9	303
06-08	3.6	2.3		7.2	1.6	.7	4.9		6.9	40.8	32.0	8.1	306
09-11	3.9	3.3		4.2	2.3	1.0	1.6		6.8	49.9	28.0	8.1	307
12-14	3.6	3.3		3.3	2.6	1.3	2.6		7.2	51.3	24.8	8.1	306
15-17	2.3	2.3		4.6	2.6	1.3	3.3		6.8	55.6	19.3	8.2	306
18-20	2.3	3.3		6.9	1.7	1.3	3.3		10.6	52.1	18.5	8.0	303
21-23	2.9	4.2		4.6	5.9	.7	3.3		11.4	44.6	22.5	7.8	307
TOTALS	3.0	3.5		5.9	2.9	1.0	3.2		8.5	46.9	25.2	8.0	2440

GLOBAL CLIMATOLOGY BRANCH
LSAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	7.2	3.1		4.5	3.1	1.4	3.8		6.2	41.8	29.1	7.7	292
03-05	9.5	2.4		4.8	1.7		3.4		4.5	41.5	27.2	7.6	294
06-08	3.2	2.5		3.5	.7		1.8		5.3	48.9	34.2	8.5	284
09-11	3.1	1.4		3.1	2.7	.7	2.7		4.4	49.5	32.5	8.5	295
12-14	1.1	2.2		4.7	2.9	1.5	1.8		5.8	51.5	28.5	8.4	274
15-17	1.0	2.4		3.1	1.7	1.0	3.1		7.5	54.1	26.2	8.5	294
18-20	1.8	1.1		5.0	3.2	.7	3.9		6.4	49.3	28.6	8.4	280
21-23	3.0	3.7		6.0	3.0		2.0		7.4	46.2	28.8	8.1	299
TOTALS	3.7	2.5		4.3	2.4	.7	2.8		6.4	47.9	29.4	8.2	2312

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	7.3	1.7		4.0	3.0	.3	5.0		7.3	36.3	35.0	7.9	300
03-05	5.2	1.3		5.6	3.3	.3	3.3		5.9	36.6	38.6	8.1	306
06-08	4.0	4.3		6.4	2.0	.3	2.3		5.4	37.1	38.1	8.1	299
09-11	1.7	2.0		5.6	.3	.7	1.3		3.6	43.2	41.6	8.7	303
12-14	2.0	3.8		4.8	2.7	.3	1.7		7.2	46.8	30.7	8.3	293
15-17	2.0	3.6		6.1	2.0	1.0	2.9		4.6	42.3	33.6	8.1	307
18-20	4.1	4.1		5.4	3.1	1.0	1.4		6.1	38.4	36.4	8.0	294
21-23	6.5	2.3		5.9	3.3	1.6	4.2		7.8	32.7	35.6	7.8	306
TOTALS	4.1	2.9		5.7	2.5	.7	2.8		6.0	39.2	36.2	8.1	2408

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER
FROM HOURLY OBSERVATIONS

STATION NUMBER: 20113 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: NOV

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	9.3	2.1		5.5	4.8	1.0	4.1		7.6	28.2	37.5	7.6	291
03-05	9.6	3.1		6.5	2.4	.7	2.1		7.6	27.8	40.2	7.5	291
06-08	9.7	3.1		4.1	1.4	1.7	2.1		4.6	32.6	36.6	7.7	290
09-11	4.4	2.4		6.5	2.4	1.0	4.1		6.6	36.1	34.4	8.0	294
12-14	1.7	2.4		6.9	2.1	1.4	3.1		9.6	40.2	32.6	8.2	291
15-17	3.0	3.0		7.4	3.4	1.7	3.0		6.4	37.5	34.5	8.0	296
18-20	7.1	2.4		6.1	3.4	.7	6.4		6.4	32.8	34.8	7.7	296
21-23	9.1	1.7		7.1	4.7	.7	3.4		7.1	29.6	36.7	7.6	297
TOTALS	6.7	2.5		6.3	3.1	1.1	3.5		7.0	33.1	35.9	7.8	2346

STATION NUMBER: 20113 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	15.7	1.3		7.6	2.6	.7	4.0		6.7	30.5	28.1	6.8	302
03-05	14.6	2.9		6.2	3.2	.6	3.9		9.7	31.5	27.3	7.0	309
06-08	13.1	2.7		8.1	3.7	.3	5.4		7.1	28.3	31.3	7.0	297
09-11	11.3	4.6		5.2	3.6	.3	5.9		7.9	30.8	29.8	7.1	305
12-14	6.3	3.9		5.3	5.3	1.0	5.6		7.2	33.2	32.2	7.6	304
15-17	5.5	4.2		9.1	2.3	1.0	3.9		9.7	35.4	28.9	7.5	308
18-20	11.2	3.3		6.9	3.6	1.0	3.0		6.3	35.5	29.3	7.2	304
21-23	15.7	2.3		6.6	3.6	1.3	3.3		7.9	25.6	33.8	6.9	305
TOTALS	11.7	3.2		6.9	3.5	.8	4.4		8.0	31.4	30.1	7.1	2433

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER
FROM FOURLY OBSERVATIONS

STATION NUMBER: 221137 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-87
MONTH: ALL

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER														
	HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
JAN	ALL	12.4	3.2		6.2	5.1	1.2	4.4		7.9	31.9	25.6	6.9	2368
FEB		11.6	3.9		7.9	4.2	.9	4.9		9.0	35.6	22.0	6.9	2204
MAR		11.5	3.7		6.2	5.2	1.0	4.6		7.7	32.7	25.4	6.9	2447
APR		5.2	5.0		9.6	4.1	1.3	4.8		7.6	36.5	23.7	7.3	2350
MAY		4.6	3.4		6.7	3.9	.8	3.0		7.7	38.5	31.3	7.9	2435
JUN		2.5	3.7		6.3	3.4	.8	4.1		9.5	40.6	26.8	8.0	2356
JUL		4.5	5.8		6.9	3.6	.7	3.8		9.0	36.5	28.9	7.6	2452
AUG		3.0	3.5		5.9	2.9	1.0	3.2		6.5	46.9	25.2	8.0	2440
SEP		3.7	2.5		4.3	2.4	.7	2.8		7.4	47.9	29.4	8.2	2312
OCT		4.2	2.9		5.7	2.5	.7	2.8		6.0	39.2	36.2	8.1	2408
NOV		6.7	2.5		6.3	3.1	1.1	3.5		7.8	33.1	35.4	7.8	2346
DEC		11.9	3.2		6.9	3.5	.8	4.4		6.0	31.4	30.1	7.1	2433
TOTALS		6.9	3.6		6.9	3.7	.9	3.9		6.1	37.6	28.6	7.6	28566

FFPPFFPP	AAAAAA	RRRRRRR	TTTTTTTT	EEEEEEEE
PPPPPPPP	AAAAAAAA	RRPPRRRR	TTTTTTTT	EEEEEEEE
PC PP	AA AA	RR RR	TT	EE
PP PP	AA AA	RR RR	TT	EE
PPPPPPPP	AA AA	RRPPRRRR	TT	EEEE
FFPPPPPP	AAAAAAAA	RRRRRRR	TT	EEEE
PP	AAAAAAAA	RR RR	TT	EE
PP	AA AA	RR RR	TT	EE
PP	AA AA	RR RR	TT	EEEEEEEE
PP	AA AA	RR RR	TT	EEEEEEEE

TEMPERATURE AND RELATIVE HUMIDITY SUMMARIES

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF DAILY MAXIMUM (MINIMUM AND MEAN) TEMPERATURES

PERCENTAGE TABULATIONS PRESENTED BY 1-DEGREE FAHRENHEIT INCREMENTS PLUS THE MEAN, STANDARD DEVIATIONS AND TOTAL OBSERVATION COUNT.

THE MINIMUM TABLE ALSO INCLUDES A 33 DEGREE FAHRENHEIT VALUE.

SINCE MANY STATIONS/SITES DO NOT HAVE MAXIMUM/MINIMUM THESE TEMPERATURES WERE SELECTED BY SCANNING THE HOURLY OBSERVATIONS FOR THE HIGHEST AND LOWEST VALUES.

STATISTICS DO NOT INCLUDE INCOMPLETE MONTHS.

FOUR OR MORE COMPLETE MONTHS ARE REQUIRED FOR COMPUTING

EXTREME MAXIMUM AND MINIMUM VALUES

DATA DERIVED FROM EXTRACTING THE HIGH AND LOW TEMPERATURES FROM THE HOURLY OBSERVATIONS.

PRESENTED ARE THE HIGHEST (LOWEST) TEMPERATURE FOR THE MONTH FOR EACH YEAR.

ALSO PRESENTED ARE STATISTICAL VALUES WITH THE SAME LIMITATIONS MENTIONED ABOVE.

AN ASTERISK INDICATES AN INCOMPLETE MONTH.

MEANS AND STANDARD DEVIATIONS FOR DRY BULB (WET BULB AND DEW POINT) TEMPERATURES

DATA DERIVED FROM HOURLY OBSERVATIONS.

DATA PRESENTED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

PRESENTED ARE MEANS, STANDARD DEVIATION AND OBSERVATION COUNTS.

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF RELATIVE HUMIDITY

DATA DERIVED FROM HOURLY OBSERVATIONS.

SUMMARIZED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

PERCENTAGE VALUES PRESENTED IN 10 DEGREE INCREMENTS OF RELATIVE HUMIDITY.

ALSO PRESENTED ARE THE MEAN VALUES AND OBSERVATION COUNTS.

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

TEMPERATURES DEG F FROM
HOURLY OBSERVATIONS

MEANS AND STANDARD DEVIATIONS

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-87

HOURS	STATS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
01-02	MEAN	8.9	11.7	19.4	27.2	36.9	45.6	51.4	48.7	42.6	33.1	23.6	13.4	30.4
	SD	14.641	12.742	10.232	7.136	7.261	9.009	7.349	6.741	5.680	7.743	10.424	14.012	17.418
	TOT OBS	293	269	302	269	303	295	305	302	291	297	291	300	3537
03-05	MEAN	9.8	12.1	19.1	26.7	36.2	44.5	49.6	47.7	42.6	33.5	24.3	14.2	30.1
	SD	14.580	13.761	10.730	7.724	6.740	8.042	6.324	6.159	5.776	7.813	10.520	13.906	16.612
	TOT OBS	300	275	306	298	307	291	309	304	290	306	290	308	3586
06-08	MEAN	9.0	15.7	17.3	25.0	35.3	44.2	45.0	46.2	41.1	32.1	23.4	13.5	29.1
	SD	14.773	13.126	11.142	8.237	6.863	8.012	6.175	6.122	5.862	7.923	10.373	13.976	16.919
	TOT OBS	291	272	305	293	306	294	304	305	264	297	289	297	3539
09-11	MEAN	8.9	11.1	17.0	26.8	34.1	47.4	52.1	48.9	42.0	32.3	23.3	13.3	30.3
	SD	14.471	13.312	11.426	7.898	7.633	9.547	7.657	6.793	5.891	7.924	10.485	13.965	18.014
	TOT OBS	300	272	306	295	302	291	307	306	294	302	293	302	3572
12-14	MEAN	9.0	11.8	20.3	30.5	41.0	50.6	56.2	52.6	45.1	33.5	23.5	13.7	32.5
	SD	14.430	13.365	10.352	7.175	8.690	10.912	9.182	8.230	5.960	7.700	10.590	13.937	19.126
	TOT OBS	290	280	299	290	305	293	306	304	273	291	291	302	3524
15-17	MEAN	4.9	13.2	23.7	32.4	42.6	52.1	58.1	54.7	46.8	34.6	23.5	13.3	33.7
	SD	14.405	12.238	9.344	6.793	9.486	11.421	9.554	8.733	6.430	7.608	10.570	14.093	19.534
	TOT OBS	309	275	306	297	297	292	306	306	294	306	296	306	3590
18-20	MEAN	6.9	15.2	23.5	31.9	42.3	51.5	57.7	54.2	46.4	33.5	23.5	13.3	33.5
	SD	14.475	12.193	8.916	6.910	9.210	11.218	9.580	8.513	6.651	7.624	10.684	13.965	19.359
	TOT OBS	296	273	304	298	300	297	305	303	280	294	296	303	3539
21-23	MEAN	8.7	12.5	21.3	29.5	40.3	49.2	55.4	51.2	43.9	33.1	23.4	13.2	31.9
	SD	14.710	12.324	9.370	6.962	6.714	10.242	8.849	7.448	6.161	7.777	10.740	13.872	18.519
	TOT OBS	308	276	309	298	304	295	302	307	296	305	296	304	3600
ALL	MEAN	9.0	12.0	20.2	26.7	39.1	48.2	53.7	50.5	43.8	33.2	23.6	13.5	31.4
HOURS	SD	14.563	12.767	10.446	7.787	8.551	10.303	8.047	7.931	6.356	7.787	10.538	13.949	18.308
	TOT OBS	2397	2192	2434	2348	2424	2348	2446	2437	2304	2393	2342	2422	28487

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

WEI-BULB TEMPERATURES DEG F FROM
HOURLY OBSERVATIONS

MEANS AND STANDARD DEVIATIONS

STATION NUMBER: 2.113 STATION NAME: MURMANSK LSSR

PERIOD OF RECORD: 77-87

HOURS	STATS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
00-01	MEAN	8.5	11.1	18.4	25.5	34.2	42.0	47.0	46.5	40.8	31.7	22.6	12.9	28.7
	SD	14.367	12.126	9.679	6.653	6.158	7.195	6.028	5.983	5.634	7.364	9.932	13.522	16.267
	TOT OBS	292	267	301	286	300	292	304	301	299	296	288	297	3513
03-05	MEAN	2.4	11.5	18.3	25.3	34.1	41.8	47.2	45.9	41.1	32.2	23.4	13.7	28.8
	SD	14.128	12.565	10.202	7.212	5.919	6.930	5.511	5.830	5.661	7.434	9.970	13.504	15.984
	TOT OBS	300	273	302	296	306	290	308	303	291	305	289	308	3571
06-08	MEAN	8.5	13.1	16.7	23.9	33.2	41.4	46.4	44.5	39.8	30.8	22.7	13.0	27.8
	SD	14.310	12.641	10.739	7.706	6.086	6.883	5.363	5.829	5.778	7.508	9.847	13.573	16.077
	TOT OBS	291	270	303	291	304	294	305	304	293	295	288	296	3524
09-11	MEAN	8.5	10.7	16.4	25.1	34.9	42.9	48.1	46.2	40.4	31.1	22.4	12.9	28.5
	SD	14.077	12.760	11.066	7.259	6.218	7.378	5.886	6.080	5.751	7.602	9.991	13.552	16.622
	TOT OBS	296	269	304	294	300	288	306	305	294	301	290	299	3548
12-14	MEAN	8.6	11.1	19.1	27.7	36.7	44.5	50.1	48.1	42.5	31.9	22.6	13.2	29.8
	SD	14.102	12.471	9.745	6.191	6.682	7.775	6.254	6.440	5.703	7.286	10.108	13.483	16.979
	TOT OBS	286	279	296	290	302	292	305	304	272	289	287	300	3502
15-17	MEAN	8.5	12.5	21.8	28.9	37.6	45.3	50.9	48.9	43.0	32.6	22.6	12.8	30.5
	SD	13.965	11.527	8.221	5.829	7.030	7.831	6.099	6.524	5.676	7.065	10.053	13.670	16.945
	TOT OBS	309	272	306	294	297	288	303	305	293	305	296	305	3573
19-21	MEAN	8.6	12.5	21.7	28.8	37.4	44.9	50.9	48.9	43.0	31.9	22.5	12.7	30.4
	SD	14.101	11.667	8.174	5.916	6.922	7.833	6.238	6.404	5.965	7.254	10.166	13.521	16.919
	TOT OBS	291	272	303	287	298	295	301	300	279	294	295	301	3521
21-23	MEAN	8.3	11.7	20.0	27.2	36.4	43.9	49.9	47.0	41.6	31.7	22.5	12.6	29.5
	SD	14.298	11.750	8.743	6.356	6.663	7.627	6.264	6.104	5.892	7.351	10.221	13.462	16.710
	TOT OBS	378	274	307	295	302	291	300	304	296	303	296	301	3577
ALL	MEAN	8.0	11.4	19.1	26.5	35.6	43.3	48.9	47.0	41.5	31.8	22.7	13.0	29.2
HOURS	SD	14.149	12.202	9.797	6.863	6.648	7.562	6.170	6.319	5.857	7.371	10.025	13.520	16.589
	TOT OBS	2260	2176	2424	2333	2409	2330	2432	2426	2297	2388	2329	2407	28329

GLOBAL CLIMATOLOGY BRANCH
USAF/FLTC
AIR WEATHER SERVICE/MAC

DEW-POINT TEMPERATURES DEG F FROM
HOURLY OBSERVATIONS

MEANS AND STANDARD DEVIATIONS

STATION NUMBER: 201110 STATION NAME: MURMANSK LSSR

PERIOD OF RECORD: 77-87

HOURS LST	STATS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
00-01	MEAN	5.4	7.6	14.9	21.3	30.0	37.9	44.5	43.9	36.5	29.2	19.9	9.9	25.5
	SD	14.323	12.015	9.776	7.706	6.709	6.961	6.246	6.124	6.442	7.629	10.027	13.678	16.429
	TOT OPS	292	267	301	246	300	292	304	301	289	296	248	297	3513
03-05	MEAN	6.4	4.1	15.1	21.6	30.6	38.5	44.6	44.0	39.2	29.9	20.7	10.6	26.0
	SD	14.216	12.506	10.180	7.784	6.438	6.959	5.769	6.133	6.283	7.913	9.975	13.603	16.352
	TOT OPS	300	273	302	246	306	290	308	303	291	305	269	306	3571
06-08	MEAN	5.5	6.8	13.8	20.5	29.4	37.9	43.9	42.8	38.0	28.3	20.0	10.1	25.0
	SD	14.367	12.724	10.711	9.273	6.611	7.095	5.762	6.099	6.374	6.026	9.994	13.726	16.429
	TOT OPS	291	270	303	291	304	294	305	304	293	295	288	296	3524
09-11	MEAN	5.4	7.4	13.5	20.9	29.9	37.7	44.3	43.4	38.4	28.8	19.8	10.0	25.1
	SD	14.130	12.744	11.139	7.668	6.802	7.416	6.100	6.453	6.370	6.157	9.971	13.700	16.577
	TOT OPS	296	269	304	294	300	288	306	305	294	301	290	299	3548
12-14	MEAN	5.6	7.7	15.1	21.5	30.1	37.6	44.3	43.6	36.7	28.9	19.8	10.2	25.4
	SD	14.239	12.455	9.794	7.572	7.329	7.689	6.360	6.885	6.611	7.627	10.188	13.585	16.439
	TOT OPS	286	279	296	290	302	292	305	304	272	289	287	300	3502
15-17	MEAN	5.5	8.5	16.4	21.6	30.2	37.6	44.1	43.3	38.4	29.1	19.8	9.8	25.4
	SD	14.065	11.373	8.637	7.870	7.776	7.621	6.256	7.104	6.771	7.820	10.196	13.766	16.235
	TOT OPS	379	272	306	294	297	288	303	305	292	305	296	305	3573
18-20	MEAN	5.6	8.8	16.3	21.9	30.5	37.7	44.3	43.5	38.9	29.3	19.7	9.7	25.6
	SD	14.190	11.622	8.755	7.864	7.392	7.713	6.642	6.955	6.959	7.924	10.270	13.664	16.291
	TOT OPS	296	272	303	287	298	295	301	300	274	294	295	301	3521
21-23	MEAN	5.3	9.1	15.4	21.9	30.6	37.8	44.8	43.6	38.6	29.0	19.7	9.7	25.5
	SD	14.393	11.695	9.088	7.867	7.125	7.590	6.591	6.264	6.654	7.917	10.330	13.633	16.440
	TOT OPS	308	274	307	295	302	291	300	304	296	303	296	301	3577
ALL	MEAN	5.6	7.9	15.4	21.4	30.2	37.8	44.4	43.6	38.6	29.1	19.9	10.0	25.4
	SD	14.221	12.151	9.331	7.854	7.032	7.407	6.220	6.517	6.578	7.927	10.111	13.654	16.399
	TOT OPS	2381	2176	2422	2333	2409	2330	2432	2426	2297	2388	2329	2407	28329

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JAN

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NUM OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JAN	00-02	100.0	100.0	100.0	100.0	100.0	99.3	97.3	76.0	34.0	85.2	292
	03-05	100.0	100.0	100.0	100.0	100.0	100.0	96.7	76.3	37.7	85.7	300
	06-08	100.0	100.0	100.0	100.0	100.0	100.0	96.6	77.3	35.1	85.8	291
	09-11	100.0	100.0	100.0	100.0	100.0	100.0	97.0	79.2	34.0	85.7	296
	12-14	100.0	100.0	100.0	100.0	99.7	99.7	97.2	81.5	37.8	86.0	286
	15-17	100.0	100.0	100.0	100.0	100.0	100.0	97.1	78.6	36.0	85.9	305
	18-20	100.0	100.0	100.0	100.0	100.0	100.0	96.3	78.0	39.0	86.0	296
	21-23	100.0	100.0	100.0	100.0	100.0	100.0	97.1	76.3	37.7	85.9	306
TOTALS		100.0	100.0	100.0	100.0	100.0	99.9	96.9	77.9	36.7	85.8	2380

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/PAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 79-87
MONTH: FEB

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NUM OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
FEB	00-02	100.0	100.0	100.0	100.0	100.0	100.0	93.3	65.2	26.6	83.6	267
	03-05	100.0	100.0	100.0	100.0	100.0	100.0	95.2	64.8	27.8	84.1	272
	06-08	100.0	100.0	100.0	100.0	100.0	98.9	95.2	72.2	27.0	84.4	270
	09-11	100.0	100.0	100.0	100.0	100.0	100.0	97.0	71.7	25.7	84.6	269
	12-14	100.0	100.0	100.0	100.0	100.0	99.6	93.9	66.7	25.8	84.0	275
	15-17	100.0	100.0	100.0	100.0	100.0	98.5	86.4	56.3	19.9	81.3	272
	18-20	100.0	100.0	100.0	100.0	100.0	99.6	90.4	58.5	22.8	82.5	272
	21-23	100.0	100.0	100.0	100.0	100.0	99.6	92.0	63.9	24.1	83.1	274
	TOTALS	100.0	100.0	100.0	100.0	100.0	99.5	92.9	64.9	25.0	83.5	2176

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 76-87
MONTH: MAR

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NUM OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
MAR	00-02	100.0	100.0	100.0	100.0	99.7	95.7	85.7	62.1	36.5	83.2	301
	03-05	100.0	100.0	100.0	100.0	99.7	96.7	88.7	71.9	39.7	84.5	302
	06-08	100.0	100.0	100.0	100.0	100.0	98.3	92.4	78.9	43.6	86.3	303
	09-11	100.0	100.0	100.0	100.0	100.0	98.7	93.4	78.3	44.4	86.4	304
	12-14	100.0	100.0	100.0	100.0	99.7	96.6	87.7	54.1	25.7	87.9	296
	15-17	100.0	100.0	100.0	99.7	96.1	88.6	60.5	33.3	16.2	74.6	306
	18-20	100.0	100.0	100.0	99.7	97.7	87.8	65.0	34.7	13.2	74.9	303
	21-23	100.0	100.0	100.0	100.0	99.3	94.1	80.5	53.1	25.7	80.5	307
	TOTALS	100.0	100.0	100.0	99.9	99.0	94.6	80.9	58.3	30.5	81.4	2422

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87

MONTH: APR

MONTH	HOURS (LS1)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NUM OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
APR	00-02	100.0	100.0	100.0	100.0	98.3	89.5	75.9	54.7	24.8	79.5	286
	03-05	100.0	100.0	100.0	100.0	99.3	94.3	82.4	63.9	35.1	82.6	296
	06-08	100.0	100.0	100.0	99.7	99.0	96.2	85.9	60.7	30.8	83.7	291
	09-11	100.0	100.0	100.0	100.0	97.6	92.2	73.8	52.4	24.5	79.2	294
	12-14	100.0	100.0	99.7	98.6	88.6	72.4	52.4	28.3	9.3	70.5	296
	15-17	100.0	99.7	99.0	95.2	80.6	62.9	38.8	21.1	6.1	66.1	294
	18-20	100.0	100.0	98.3	95.1	83.6	65.2	49.5	28.9	8.0	68.3	267
	21-23	100.0	100.0	100.0	99.7	94.2	79.7	61.4	40.0	12.9	74.2	295
	TOTALS	100.0	100.0	99.6	96.5	92.7	81.5	65.0	44.5	12.9	75.5	2333

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: MAY

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN										MEAN	TOTAL
		10%	20%	30%	40%	50%	60%	70%	80%	90%	RELATIVE HUMIDITY	NUP	OBS
MAY	00-02	100.0	100.0	100.0	99.7	95.7	89.3	67.3	44.7	16.2	77.0	300	
	03-05	100.0	100.0	100.0	100.0	98.4	93.9	79.7	60.5	29.5	61.4	306	
	06-08	100.0	100.0	100.0	100.0	99.0	94.4	75.3	55.3	24.7	60.5	304	
	09-11	100.0	100.0	100.0	98.3	92.3	81.0	63.7	38.7	16.0	73.8	301	
	12-14	100.0	100.0	99.0	97.7	81.8	61.9	42.7	26.0	9.7	67.2	302	
	15-17	100.0	100.0	96.6	87.9	74.4	53.9	39.4	21.2	7.1	63.9	297	
	18-20	100.0	100.0	97.3	91.3	81.5	62.4	37.9	20.1	7.0	65.4	298	
	21-23	100.0	100.0	99.0	94.4	85.8	73.5	50.3	31.8	12.3	70.4	302	
	TOTALS	100.0	100.0	99.0	95.6	88.6	76.3	55.9	37.2	14.8	72.5	2406	

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 201120 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 74-87
MONTH: JUN

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN										MEAN	TOTAL
		10%	20%	30%	40%	50%	60%	70%	80%	90%	RELATIVE HUMIDITY	NUM OBS	
JUN	00-02	100.0	100.0	100.0	94.3	92.5	84.9	67.1	43.2	16.4	75.8	292	
	03-05	100.0	100.0	100.0	100.0	98.3	91.7	79.3	57.6	21.0	60.4	290	
	06-08	100.0	100.0	100.0	100.0	96.9	91.8	75.9	50.3	21.1	79.3	294	
	09-11	100.0	100.0	100.0	96.9	86.1	72.9	54.5	31.9	10.2	71.4	288	
	12-14	100.0	100.0	96.9	84.9	73.3	59.2	39.0	23.3	11.6	64.4	292	
	15-17	100.0	100.0	94.4	80.6	67.4	49.0	33.3	19.4	8.7	61.0	288	
	18-20	100.0	100.0	95.9	85.8	72.5	52.2	34.9	22.4	7.5	62.6	295	
	21-23	100.0	100.0	97.9	90.1	83.2	63.9	46.4	25.4	9.3	67.4	291	
	TOTALS	100.0	100.0	98.1	92.7	83.8	70.7	53.8	34.2	13.5	70.3	2330	

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 78-87
MONTH: JUL

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN	TOTAL
		10%	20%	30%	40%	50%	60%	70%	80%	90%	RELATIVE HUMIDITY	NUM OBS
JUL	00-02	100.0	100.0	99.7	99.0	97.0	88.5	78.0	48.4	20.4	79.5	304
	03-05	100.0	100.0	100.0	100.0	99.4	94.5	89.6	67.0	29.0	84.0	306
	06-08	100.0	100.0	100.0	99.7	98.4	96.1	87.9	63.9	27.0	83.2	305
	09-11	100.0	100.0	99.7	98.0	95.4	84.3	69.3	43.1	19.0	76.3	306
	12-14	100.0	100.0	97.7	91.5	79.7	66.9	44.9	23.9	8.0	66.9	305
	15-17	100.0	99.7	97.0	86.1	71.9	53.0	38.0	19.1	6.7	62.8	303
	18-20	100.0	99.7	95.3	89.7	73.4	55.9	43.2	21.6	7.0	63.9	301
	21-23	100.0	100.0	98.3	94.0	87.0	70.3	50.0	31.0	13.3	70.1	300
	TOTALS	100.0	99.9	98.5	94.6	87.8	76.3	62.6	39.0	16.4	73.2	2432

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/HAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 201170 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 79-87
MONTH: AUG

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NUM OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
AUG	00-02	100.0	100.0	100.0	100.0	99.7	98.0	91.4	67.1	25.0	93.8	301
	03-05	100.0	100.0	100.0	100.0	100.0	100.0	96.7	78.2	43.6	87.0	303
	06-08	100.0	100.0	100.0	100.0	100.0	99.7	98.0	80.3	44.4	88.1	304
	09-11	100.0	100.0	100.0	100.0	99.7	97.0	86.6	58.0	19.7	81.9	305
	12-14	100.0	100.0	100.0	100.0	94.4	76.0	55.6	31.3	17.2	72.5	304
	15-17	100.0	100.0	99.7	95.7	83.6	64.9	44.3	24.3	7.9	67.7	305
	18-20	100.0	100.0	99.7	96.2	87.3	69.7	45.3	24.7	11.0	68.8	306
	21-23	100.0	100.0	100.0	95.7	97.0	89.1	71.7	38.5	13.6	76.7	306
TOTALS		100.0	100.0	99.9	99.0	95.2	86.5	73.7	50.3	21.7	73.3	2421

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 201120 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: SEP

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN	TOTAL
		10%	20%	30%	40%	50%	60%	70%	80%	90%	[RELATIVE HUMIDITY]	NOB
SEP	00-00	100.0	100.0	100.0	100.0	100.0	97.9	92.4	75.1	36.0	85.6	285
	03-05	100.0	100.0	100.0	100.0	100.0	99.7	96.2	81.1	46.7	87.8	191
	06-08	100.0	100.0	100.0	100.0	100.0	99.6	98.2	83.4	49.1	88.7	283
	09-11	100.0	100.0	100.0	100.0	100.0	99.7	96.3	80.7	36.7	86.9	294
	14-16	100.0	100.0	100.0	100.0	97.8	92.6	79.0	47.4	15.4	78.7	272
	19-21	100.0	100.0	100.0	94.0	94.2	81.9	64.8	34.5	10.0	73.8	293
	24-26	100.0	100.0	100.0	99.3	96.4	84.9	67.0	42.7	15.8	76.1	279
	29-31	100.0	100.0	100.0	100.0	99.3	97.3	85.1	58.8	22.6	82.0	296
	TOTALS	100.0	100.0	100.0	99.8	98.5	94.2	84.9	62.9	28.8	82.4	2297

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 221130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: OCT

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN										MEAN	TOTAL
		10%	20%	30%	40%	50%	60%	70%	80%	90%	(RELATIVE HUMIDITY)	NUM	OBS
OCT	00-02	100.0	100.0	100.0	100.0	100.0	98.6	93.9	79.4	32.8	86.0	291	
	03-05	100.0	100.0	100.0	100.0	100.0	99.2	93.1	81.3	40.7	87.0	301	
	06-08	100.0	100.0	100.0	100.0	99.7	98.0	93.2	76.9	44.4	86.5	291	
	09-11	100.0	100.0	100.0	100.0	100.0	98.3	93.4	80.4	46.2	87.3	301	
	12-14	100.0	100.0	100.0	100.0	100.0	97.2	88.2	70.2	28.0	83.7	285	
	15-17	100.0	100.0	100.0	100.0	99.3	94.1	82.0	58.4	25.6	81.2	301	
	18-20	100.0	100.0	100.0	100.0	100.0	98.6	89.1	69.0	33.7	84.1	294	
	21-23	100.0	100.0	100.0	100.0	100.0	98.7	93.1	74.3	32.7	85.1	303	
	TOTALS	100.0	100.0	100.0	100.0	99.9	97.9	90.8	73.7	35.2	85.1	2388	

GLOBAL CLIMATOLOGY BRANCH
USAF/CIAC
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTHS: 6,00

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NUM OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
NOV	00-07	100.0	100.0	100.0	100.0	99.7	99.7	94.1	79.0	39.5	86.1	286
	08-05	100.0	100.0	100.0	100.0	99.7	99.7	95.3	77.5	41.9	86.4	285
	06-08	100.0	100.0	100.0	100.0	99.7	99.7	95.5	77.3	43.1	86.5	286
	09-11	100.0	100.0	100.0	100.0	100.0	99.7	95.9	79.7	40.4	86.9	290
	12-14	100.0	100.0	100.0	100.0	100.0	99.7	94.4	75.6	41.1	86.2	287
	15-17	100.0	100.0	100.0	100.0	100.0	99.7	94.3	73.6	37.2	85.7	290
	18-20	100.0	100.0	100.0	100.0	100.0	99.7	96.3	73.6	34.6	85.6	291
	21-23	100.0	100.0	100.0	100.0	100.0	99.7	96.3	79.1	35.1	85.9	290
TOTALS		100.0	100.0	100.0	100.0	99.9	99.5	95.3	77.1	39.0	86.2	2329

GLOBAL CLIMATOLOGY BRANCH
USAFETAC
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 201130 STATION NAME: MURMANSK USSR

PERIOD OF RECORD: 77-86
MONTH: DEC

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN	TOTAL
		10%	20%	30%	40%	50%	60%	70%	80%	90%	(RELATIVE HUMIDITY)	NUM OBS
DEC	00-02	100.0	100.0	100.0	100.0	100.0	99.3	95.6	81.1	37.7	85.9	297
	03-05	100.0	100.0	100.0	100.0	100.0	99.4	96.4	78.6	39.6	86.4	301
	06-08	100.0	100.0	100.0	100.0	100.0	99.3	96.6	79.7	36.5	85.9	291
	09-11	100.0	100.0	100.0	100.0	100.0	99.7	97.3	78.6	37.1	86.0	296
	12-14	100.0	100.0	100.0	100.0	100.0	100.0	95.7	78.0	35.7	85.5	300
	15-17	100.0	100.0	100.0	100.0	100.0	99.7	95.4	80.7	37.4	85.7	301
	18-20	100.0	100.0	100.0	100.0	100.0	99.7	97.7	80.7	31.0	85.6	301
	21-23	100.0	100.0	100.0	100.0	100.0	99.7	96.7	79.1	40.5	86.1	301
TOTALS		100.0	100.0	100.0	100.0	100.0	99.6	96.3	79.6	36.7	85.9	2407

GLOBAL CLIMATOLOGY BRANCH
USAF/ETAC
AIR WEATHER SERVICE/MFC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 221130 STATION NAME: MLRMANSK USSR

PERIOD OF RECORD: 77-87
MONTH: ALL

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN										MEAN	TOTAL
		10%	20%	30%	40%	50%	60%	70%	80%	90%	[RELATIVE HUMIDITY]	NUM OBS	
JAN	ALL	100.0	100.0	100.0	100.0	100.0	99.9	96.9	77.9	36.7	85.8	2380	
FEB		100.0	100.0	100.0	100.0	100.0	99.5	92.9	64.9	25.0	83.5	2176	
MAR		100.0	100.0	100.0	99.9	99.0	94.6	80.9	58.7	30.6	81.4	2427	
APR		100.0	100.0	99.6	98.5	92.7	81.6	66.7	44.5	19.9	75.5	2333	
MAY		100.0	100.0	99.0	95.9	88.6	76.3	58.8	37.3	14.8	72.5	2409	
JUN		100.0	100.0	98.1	92.7	83.8	70.7	53.8	34.2	13.5	70.3	2330	
JUL		100.0	99.9	98.5	94.6	87.8	76.3	62.6	39.9	16.4	73.2	2432	
AUG		100.0	100.0	99.9	99.0	95.2	86.8	73.7	50.3	21.7	78.3	2426	
SEP		100.0	100.0	100.0	99.8	98.5	94.2	84.9	62.9	28.8	82.4	2297	
OCT		100.0	100.0	100.0	100.0	99.9	97.9	90.8	73.7	35.2	85.1	2368	
NOV		100.0	100.0	100.0	100.0	99.9	99.5	95.3	77.1	39.2	86.2	2325	
DEC		100.0	100.0	100.0	100.0	100.0	99.6	96.3	79.6	36.3	85.9	2407	
TOTALS		100.0	100.0	99.6	98.4	95.5	89.7	79.1	58.4	26.5	80.7	26324	

DATA NOT AVAILABLE

PPPPPPPP	AAAAAA	RRRRRRR	TTTTTTTT	EEEEEEEEE
PPPPPPPP	AAAAAA	RRRRRRRR	TTTTTTTT	EEEEEEEEE
PP PP	AA AP	RR RR	TT	EE
PP PP	AA AA	RR RR	TT	EE
PPPPPPPP	AA AA	RRRRRRRR	TT	EEEEEE
PPPPPPPP	AA AAAA	RRRRRRR	TT	EEEEEE
PP	AA AAAA	RR RR	TT	EE
PP	AA AA	RR RR	TT	EE
PP	AA AA	RR RR	TT	EE
PP	AA AA	RR RR	TT	EE

DATA NOT AVAILABLE